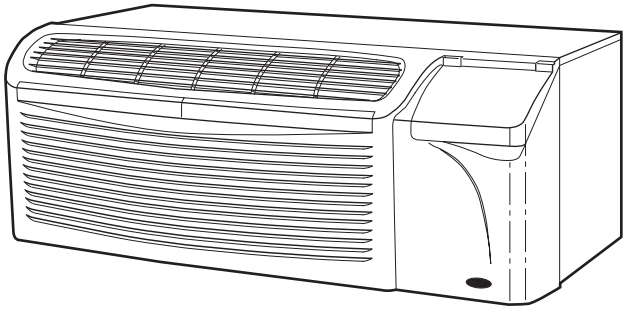
ARCHITECTS AND ENGINEERS' MANUAL

PREMIER SERIES 52P
COMFORT SERIES 52C

PACKAGED TERMINAL
AIR CONDITIONERS
AND HEAT PUMPS



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For more information available on the internet, see the **www.carrier.com** or **www.lodgingAC.com** web sites.

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Valued Carrier Customer,

Carrier’s Architects and Engineer’s manual has been specifically developed to make your product and accessory selection easier and faster. This manual will help you customize your application to ensure the greatest comfort for your guests and the highest reliability and lowest costs for you.

Enjoy the ultimate in comfort, humidity control, and energy savings with Carrier’s complete line of Packaged Terminal Air Conditioning (PTAC) products. Choose from either the Premier series (52P) which is Carrier's most energy efficient PTAC unit ever, or the Comfort series (52C) for mid-range energy efficiency and outstanding value.

The Premier and Comfort series PTAC lines have many common features and benefits. The 52P and 52C units are both built on the same platform with common components and airflow systems to ensure the highest quality product for your money. The most significant difference between the 52P and 52C products is the refrigerant system. The Premier refrigerant system utilizes Carrier's highest efficiency compressors and coil design to achieve maximum energy efficiency. The Comfort refrigerant system uses our standard efficiency compressors and coils to attain competitive efficiency levels which exceed the industry standard ARI minimum-efficiency levels.

It’s your choice. Choose the Premier series and start recovering your investment immediately through energy savings, or choose our Comfort series and enjoy years of economical, trouble-free operation and comfort.

Thank you for choosing Carrier and investing in the highest quality air conditioning and heating system ever.

Best regards,

Lodging Products Group

APPLICATIONS

Whether you are designing a new structure or replacing packaged terminal air conditioning units in an existing building, Carrier will meet your needs.

- Hotels and motels
- Nursing homes and assisted living care centers
- Offices
- Apartments
- Single-family dwellings
- Home conversions and residential add-ons

NEW CONSTRUCTION

The Carrier 52P and 52C Packaged Terminal Air Conditioning (PTAC) unit is designed to meet the needs of the architect, engineer, and contractor. For unit installation, Carrier's expert support network will assist in all applicable aspects of the construction project, from preparing a budget to start-up.

ADVANTAGES FOR NEW CONSTRUCTION

Design Flexibility For The Architect/Engineer

- Super-quiet performance, indoors and out
- No bulky duct system
- No separate equipment room
- No water towers or additional cooling equipment
- No complex match-up of different HVAC components
- Less sensitivity to building orientation (sun, wind, shade)
- Optional architectural grille to permit custom exterior appearance

Initial Cost Savings For The Building Owner

- No expensive component HVAC system purchase
- No equipment room or maintenance engineering staff
- Two-part delivery to minimize on-site damage
- Weather-protected wall sleeve that goes in place during construction; chassis that slides in place after construction
- No seasonal changeover required for cooling or heating — units are self-contained comfort systems

Lower Operating Costs And Reliable Comfort For The Occupant

- Heat pump models offer substantial savings over models with conventional electric resistance heaters
- Individual units allow tenants to choose the degree of comfort and operating economy.
- Rapid servicing reduces downtime: complete chassis can be replaced in minutes without disrupting other occupants.
- Each unit operates independently of other units in the building. No dependency by building on central HVAC system.

RETROFIT/REPLACEMENT

If you are replacing a unit in an existing wall sleeve, your options include:

- Replace the existing wall sleeve with a Carrier Weather Last™ sleeve. See accessory sleeve section for selecting the correct sleeve for your application. Note, in most cases, when replacing the wall sleeve, the exterior grille must also be replaced.
- Use an existing sleeve and exterior grille. The Carrier 52P and 52C series PTAC will fit into most major competitors wall sleeves/grilles, including GE, Amana, Trane, Bryant, Carrier 52S and Carrier 52B, and NO accessory retrofit kit is required. Carrier will also retrofit into Friedrich T series and ZoneAire wall sleeves, with a required wall sleeve extension (see accessory Friedrich Retrofit Wall Sleeve Adapter).

IMPORTANT: All other sleeve or exterior grille retrofit applications need prior approval from Carrier. Please contact your Carrier representative for assistance.

CARRIER WARRANTY

Carrier's five-year warranty is the most comprehensive in the industry. Carrier provides:

- Full coverage for parts and labor for first year.
- Four additional years of full coverage on sealed refrigeration systems.
- Limited second through fifth year coverage on non-refrigeration system parts.

APPLICATION CONSIDERATIONS

Installation instructions are shipped with all PTAC units. It is important that air conditioning systems be properly sized and installed for each application in order to achieve the desired temperature and humidity levels within the space to be conditioned. It is strongly recommended that a professional engineer match the PTAC units with the building structure and climate.

The following application considerations are all important in choosing the proper PTAC system for the building structure.

Undersizing

If a PTAC unit is undersized (cooling capacity is less than required capacity for an application), the unit will not be able to cool the space down to the desired temperature during very hot days. The result could be warm and humid or warm and dry conditioned space.

Oversizing

If a PTAC unit is oversized (cooling capacity is greater than required capacity for the specific application), the unit will cool the space down to the desired temperature too quickly.

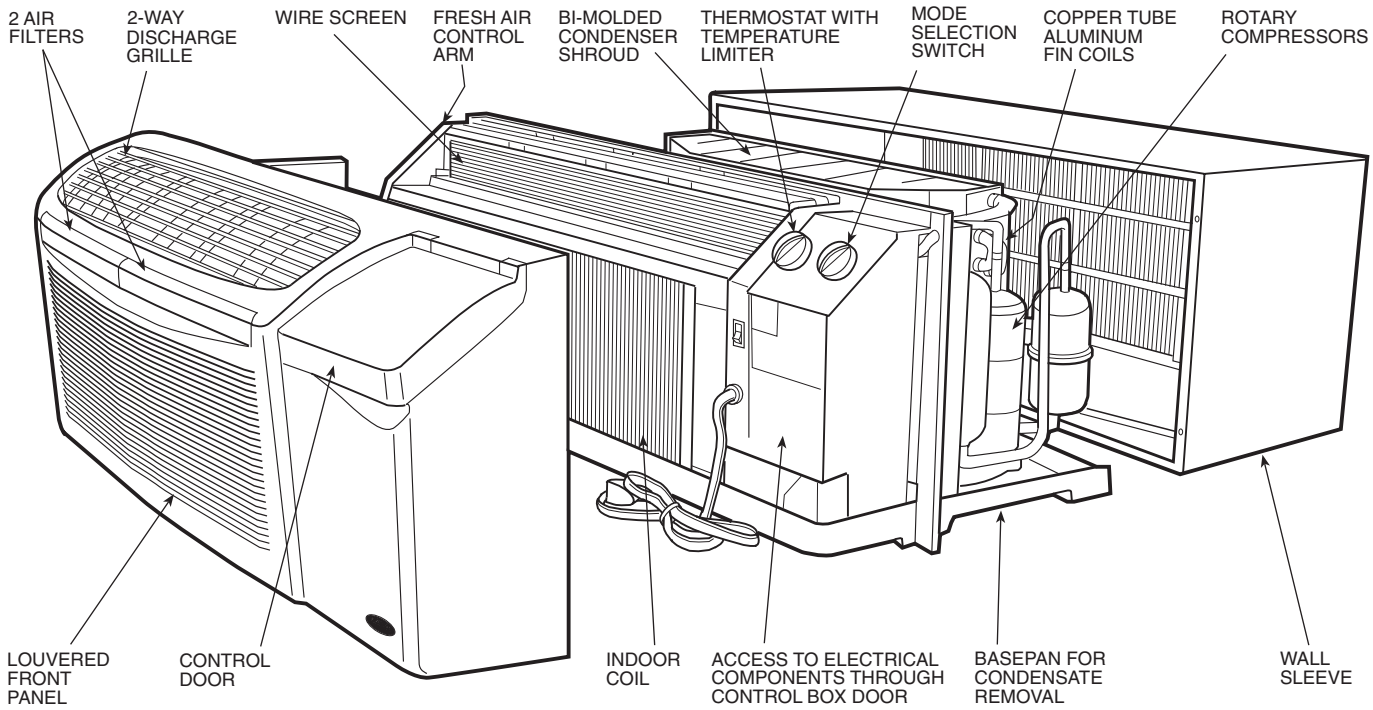
The unit will cycle on and off, however, dehumidification only takes place when the unit is operating. The result of this type of application in a hot and/or humid climate would be a cool, yet excessively humid, space.

Air Infiltration

Excessive air infiltration can intensify problems associated with undersizing or oversizing a PTAC unit. This can be the cause of insufficient cooling, dehumidification, or heating. Sources of air infiltration include vents, gaps around windows and doors, and improperly sealed floors, ceilings or wall joints.

PRODUCT OVERVIEW (52P AND 52C)

This section summarizes product features covered in detail in later sections of this manual:



Polymer, Metal or Extended Wall Sleeve — Designed for rugged duty, acoustic absorption, and attractive appearance for years to come.

Rotary Compressors — Provide quiet, reliable operation.

Copper Tube Aluminum Fin Coils — Enhanced coils provide durability, high performance, and ease of operation.

Fresh Air Control Arm — Allows outdoor air into room through vent filter for improved air quality.

Fan Cycle Switch — Dual options:
(1) Continuous fan operation.
(2) Cycle fan ON and OFF with compressor operation.

Thermostat with Temperature Limiter — Provides improved temperature control with a temperature limiter that allows temperature range restraints for the unit by making a simple adjustment.

Anti-Theft Knobs — Provides protection against theft of the thermostat knob and the mode selection knob.

Control Door — Provides protection for controls and enhances appearance.

Easy Access to Electrical Components — Simply remove two screws and drop down the control box door.

Improved Condensate Removal — Minimizes condensate water on outside of building.

New Two-Piece Filter Design — Provides improved air filtration and can be removed easily for cleaning.

Durable Discharge Grille — Made of polycarbonate; holds up under the toughest conditions.

Louvered Front Panel — Made of high impact polystyrene. Provides improved performance and quiet operation.

Mode Selection Switch — Rotary switch allows for easy selection of operating mode.

Bi-Molded Condenser Shroud — The two-piece condenser shroud allows easy access for service and maintenance to the outdoor coil and other components.

PRODUCT FEATURES AND BENEFITS (52P AND 52C)

The 52P and 52C models are a single-package, through-the-wall unit for heating and cooling hotel rooms, offices, apartments, condominiums, and residential additions. Features include:

- Improved sound quality for quiet operation
- Exceeds ARI (Air Conditioning and Refrigeration Institute) efficiency requirements with exceptional energy efficiency ratios (EERs)
- Easy access, lifetime filters
- User friendly controls
- Easy to read dials
- Enhanced temperature and humidity control
- Improved condensate removal system
- Multi-room structure design
- Fixed wall sleeve, slide-out chassis
- Attractive, durable cabinet featuring new design
- Chassis that easily retrofits to most major competitors' sleeves without use of retrofit kit
- Low operating costs
- No bulky duct system
- No seasonal changeover

QUIET OPERATION

Occupants and neighbors are protected against noise intrusion. Indoor sound reduction is achieved because of the unit's design and its louvered front cover, indoor scroll and blower, and heavy gage unit partition. Rotary compressors provide quiet, reliable operation. The indoor scroll provides a more uniform air discharge.

The new aerodynamic split condenser shroud design improves airflow and reduces outdoor noise, providing a more relaxing outdoor environment. The new split design allows for easy access to the outdoor coil to facilitate routine cleaning of the coil. The propeller-type fan design allows for efficient low-speed operation.

MOST EFFICIENT PERFORMANCE

High EERs provide excellent operating economy. The system operates without bulky ductwork, separate equipment room, and complex match-up of different components. Heating and Cooling modes are available without seasonal changeover.

EFFICIENT FAN MOTOR

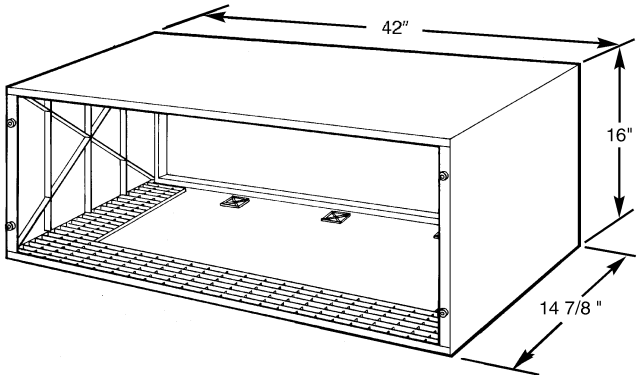
An efficient, totally enclosed PSC (permanent split capacitor) fan motor provides a choice of high or low speeds for heating and cooling. A fan-only setting provides air circulation. **The fan motor requires no maintenance and no lubrication**.

NO-RUST WEATHER LAST™ WALL SLEEVE AND FRONT PANEL

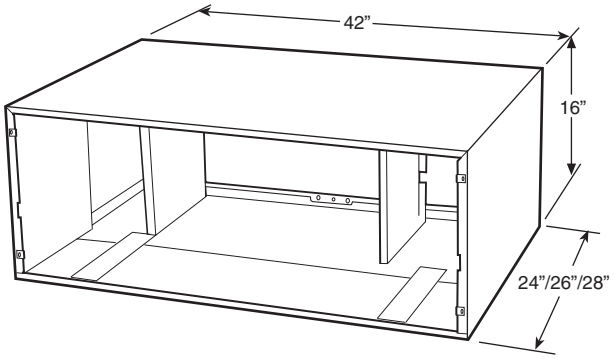
The indoor front panel and polymer wall sleeve use nonmetallic compounds that never rust or corrode, do not support combustion, and do not give off toxic fumes. The weather-resistant feature exceeds requirements of Underwriters' Laboratories and resists damage caused by impact and scratching. The Weather Last feature also insulates and has up to 10 times the acoustic absorption of metal cabinets.

Insulated polymer wall sleeves combine all of the above features with factory-installed insulation. The insulation helps to reduce heat loss, save energy, provide better sound absorption, and reduce the risk of sleeve sweating.

Carrier's metal wall sleeves are available in a variety of sizes for most standard and deep wall applications. All metal wall sleeves come with factory-installed insulation, designed to minimize heat loss and reduce outdoor noise transmissions into the room.



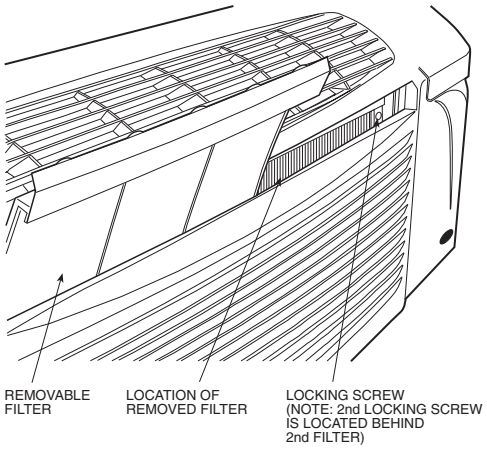
Standard Wall Sleeve (Polymer or Metal)



Deep Wall Sleeve (Metal)

REMOVABLE FRONT PANEL

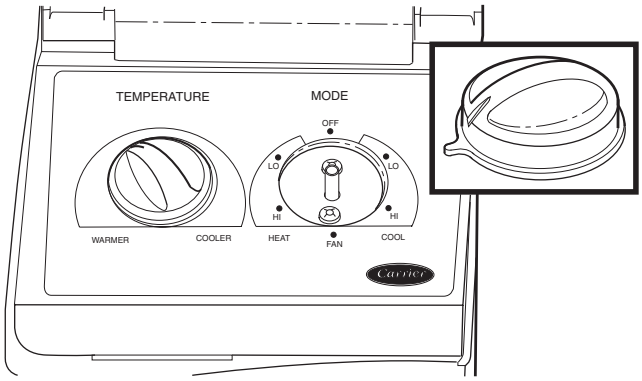
The louvered front panel fits firmly onto the chassis and features easy removal for service. It provides front air intake to enhance performance and quiet operation. It also allows the option of flush mounting PTAC unit to the floor. **If desired, the front panel can be secured to the unit with field-supplied screws.** The 2 locking screws (if installed) are located behind the removable filter handles.



Removable Front Panel

ANTI-THEFT KNOBS

The anti-theft knobs are captured underneath the front panel of the unit to prevent the knobs from being removed or stolen.

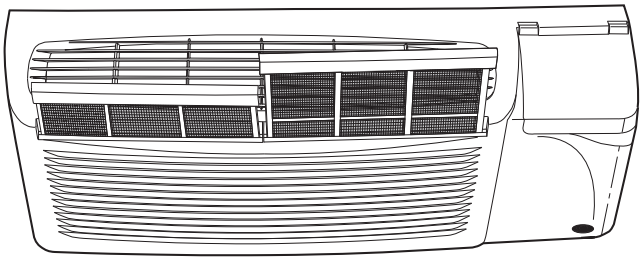


Anti-Theft Knobs

PRODUCT FEATURES AND BENEFITS (cont)

TWO-PIECE LIFETIME INDOOR FILTER

New two-piece removable filters easily slide in and out from the front of the PTAC unit and are interchangeable. The front panel does not need to be removed to access or change the filters. The filters are washable and permanent.



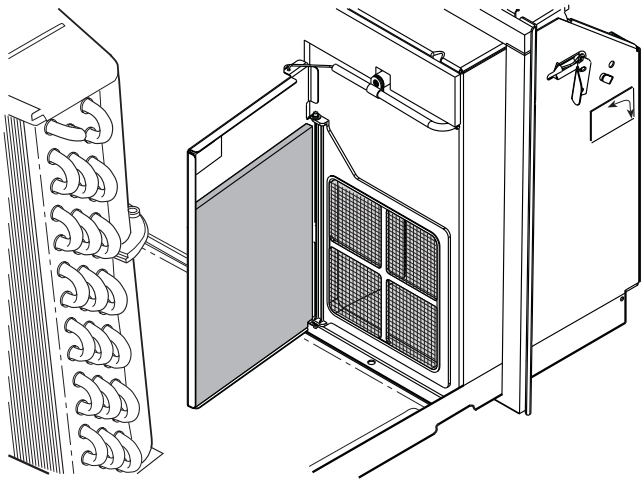
Two-Piece Indoor Filter

WASHABLE VENT AIR FILTER

The unique vent system is activated by a two-position control. Fresh outside air is redirected by the vent door to an inside low-pressure area. A molded plastic filter prevents dirt and debris from entering the room side of the unit. The vent mechanism is made from noncorrosive material ensuring reliable operation. A magnet on the door and high-pressure airflow create a tight, draft-free seal when the vent door is closed.

The vent will provide 50 CFM of fresh air.

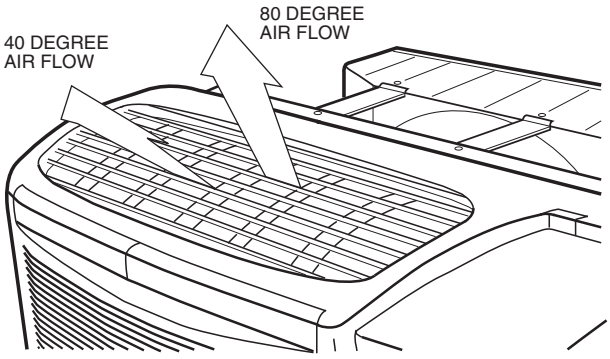
NOTE: If more fresh air CFM is required, a Power-Vent Kit is available (see accessories).



Outdoor Vent Filter Location

BI-DIRECTIONAL DISCHARGE GRILLE

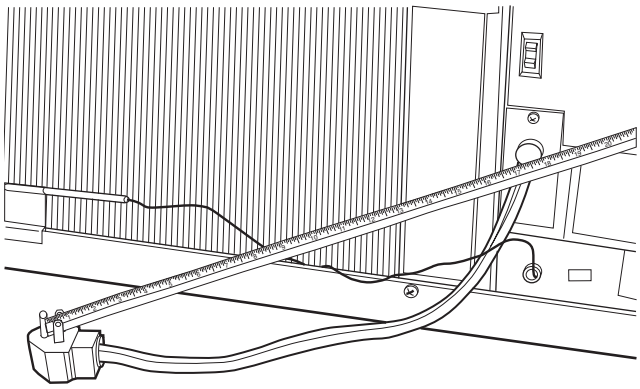
The discharge grille is constructed of durable polycarbonate and is reversible. Air flows upward at a 40 degree angle to the floor but can easily be adjusted to an 80 degree angle to the floor.



Reversible Polycarbonate Discharge Grille

POWER CORD FOR 265-V UNITS

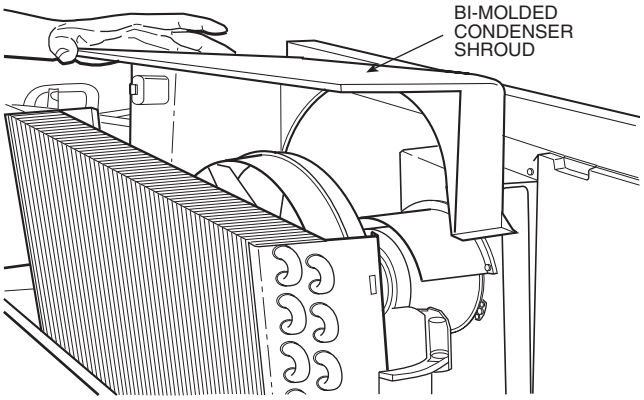
A power cord is included for 265-v units. The power cord is 18 in. long (cord extends 15 in. from bottom of front panel) and per UL and National Electrical codes must plug into an electrical subbase.



265-V Unit with Power Cord

BI-MOLDED CONDENSER SHROUD

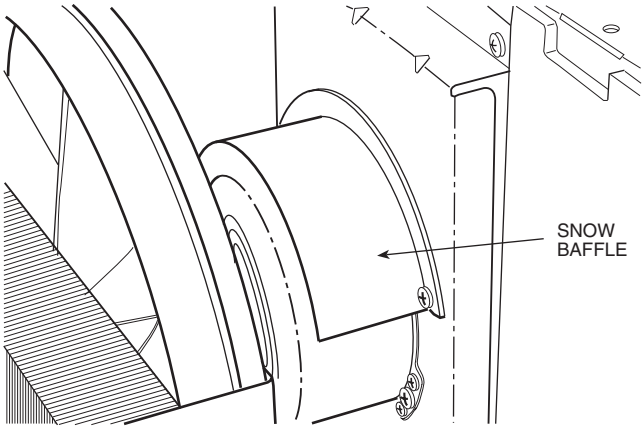
The bi-molded condenser shroud provides easy access for service and maintenance of the condenser coil and related components.



Bi-Molded Condenser Shroud

SNOW BAFFLE

The snow baffle is provided to keep snow from blowing into the intake and landing on the internal components of the PTAC unit. Melted snow can form ice on moving parts and cause damage to the unit.

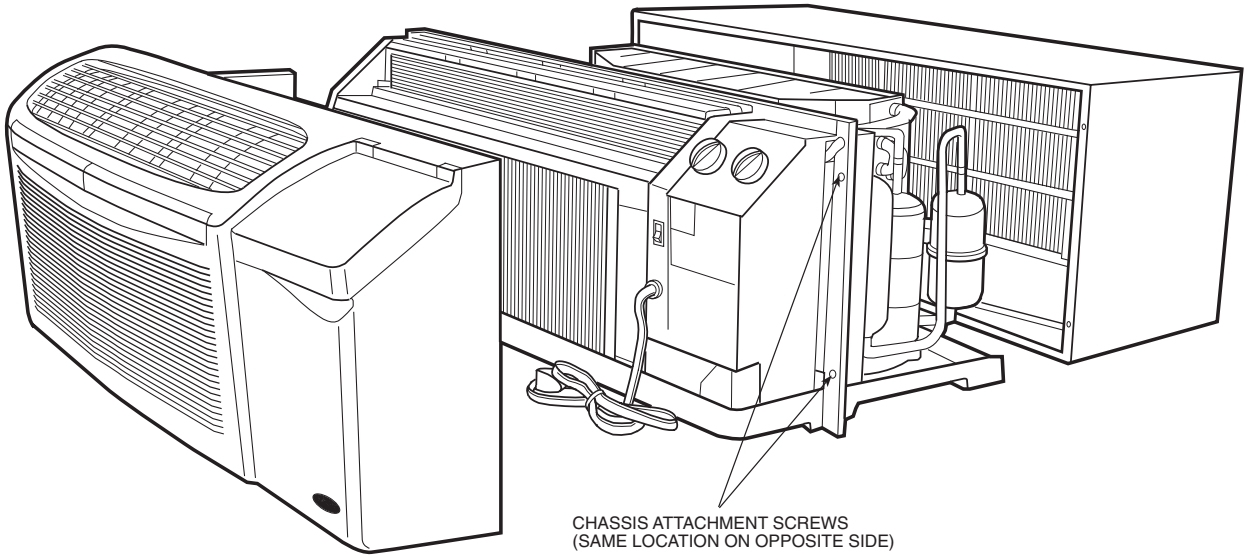


Snow Baffle

PRODUCT FEATURES AND BENEFITS (cont)

EASY ACCESS TO CHASSIS

Access to the chassis simply requires removing four screws and then sliding the chassis out of the sleeve for service.



Easy Service Access

HIDDEN CONTROLS

The factory-wired control box houses all control components and is quickly accessible without removing the chassis from the wall sleeve. By simply removing two screws on control box, the hinged door lowers, providing quick access to all the electrical components. The wiring diagram is located on the front of the control box door.

Temperature Limiter and Control Knob

The limiter reduces operating costs by allowing the owner to control the range of cooling and heating temperatures available to the occupant. It is located under the front panel on control box, out of the occupant's sight. Each setting on the limiter is equivalent to 5° F and the range of temperature settings available to the owner is from 60 to 90 F. The limiter is not pre-set at the factory (providing full range for the occupant).

Outdoor Air Vent Control

Control of the outdoor-air vent is handled by a vent handle located under the front panel on the left side of the unit. This handle rotates to manually open and close the outdoor vent.

The vent will provide 50 CFM of fresh air.

NOTE: If more fresh air CFM is required, a Power-Vent Kit is available (see accessories).

Fan Cycle Switch

The fan cycle switch allows the fan to operate in 2 modes:

- Continuous — This setting allows the fan to run continuously, circulating air even when the temperature setting has been satisfied. This setting, which helps to keep the room temperature closer to the thermostat setting, is used for maximum comfort.
- Cycle — This setting allows the fan to cycle on and off with the compressor during heating or cooling. The fan stops when the temperature setting is reached. The longer unit off-time makes this option more energy-efficient with only slightly wider variations in room temperature.

NOTE: On wall thermostat models, the fan cycle/ continuous feature is typically located at the wall thermostat.

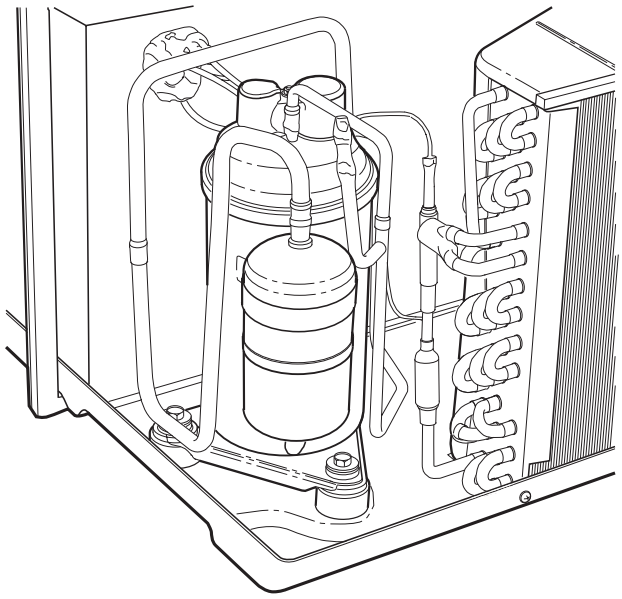
ENHANCED COPPER TUBING

Enhanced copper tubing is more efficient and durable and can be repaired in the field, if required.

Because copper is a very stable metal, it is durable and resists corrosion. Enhanced copper tubing increases:

- heat transfer capability
- the efficiency of the cooling and heating processes
- thermal conductivity (by creating additional tube surface and turbulent refrigerant gas flow)

Every Carrier PTAC coil undergoes thorough leak testing and pressure testing up to 350 lb per square inch.



Enhanced Copper Tubing

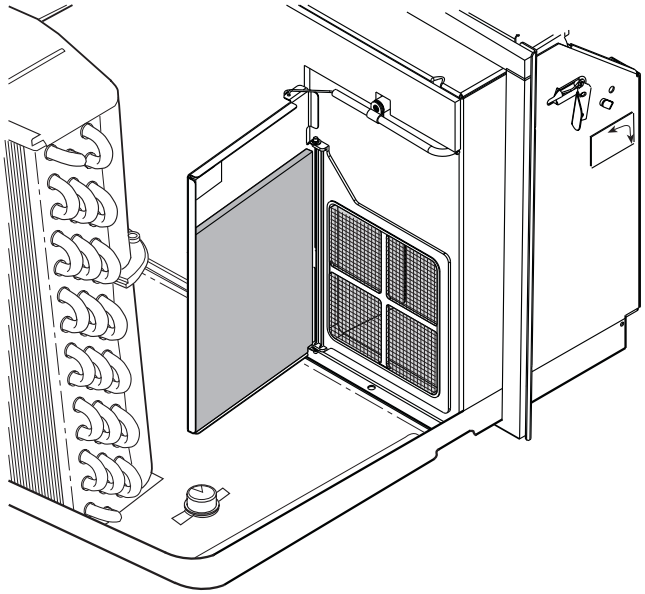
SEAMLESS BASEPAN

Seamless drawn basepan walls add protection against water accumulation resulting from storm-driven rain with heavy wind.

Carrier's deep basepan holds up to $1^1/_2$ gallons of water without spilling. Closed cell foam insulators are located between the basepan and coils, keeping coils from direct contact with the basepan and providing additional protection against corrosion.

CONDENSATE DRAIN VALVE

The temperature-activated drain valve opens when the outdoor temperature drops below 45 F to prevent water from freezing in the basepan.

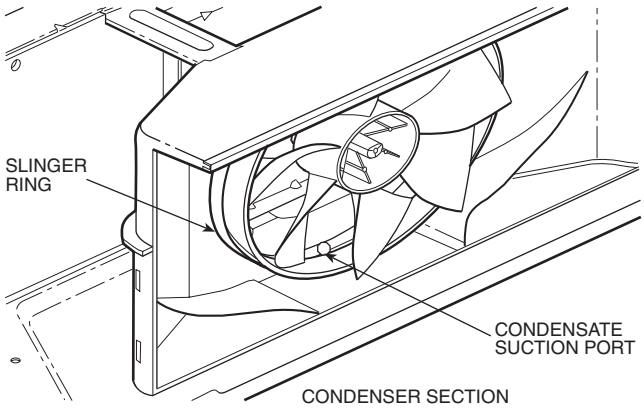


Condensate Drain Valve Prevents Water from Freezing in Basepan

CONDENSATE REMOVAL SYSTEM

Carrier's 52P and 52C Series units have an improved condensate (water) disposal system. In addition to slinger ring technology, Carrier has developed and patented a Condensate Suction Port. The suction port, along with the slinger ring, draws in water which is sprayed up onto the outdoor coil. The water then evaporates, thus providing better disposal of excess condensate, improving unit efficiency.

NOTE: If it is necessary to remove 100% of the condensate, the Carrier Drain Kit (Part No.: DRAIN-KIT-4PK) is recommended.



Condensate Disposal System

PRODUCT FEATURES AND BENEFITS (cont)

HEAT PUMPS PAY THEIR OWN WAY

Heat pump models are available at a nominal additional cost. In many locales, the payback is realized in just a few months. Cost and payback details are provided on the next page.

Special Features

Two-Stage Indoor Thermostat:

The indoor thermostat senses the indoor temperature and automatically turns on the electric heat to warm the room quickly. After the desired temperature conditions have been satisfied, the thermostat automatically switches to heat pump mode. If compressor failure occurs, the thermostat will provide backup electric heat automatically.

Outdoor Thermostat:

During the heating cycle, the outdoor thermostat senses outdoor coil temperature. It switches the unit to electric heat mode when the outdoor coil temperature is 20 F or below (approximately 35 F outdoor-air temperature). The thermostat switches the unit back to heat pump mode when the outdoor coil temperature rises above 40 F, which is enough to provide heat to meet demand. The entire operation is completely automatic.

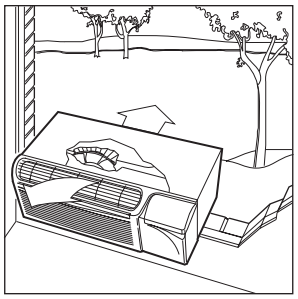
Reversing Valve:

The reversing valve provides quiet refrigerant flow after the unit shuts off. The valve controls the direction of refrigerant flow for both heating and cooling functions and remains energized as long as the controls are in the heat position. When the cooling controls are activated, the valve automatically reverses to the cooling position.

Manual Compressor Override Switch:

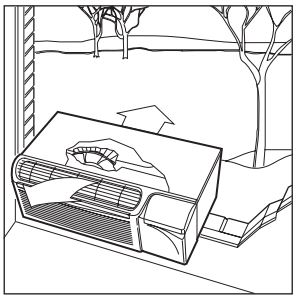
This switch completely locks out the compressor. Note that the compressor and heater do not operate at the same time, thus conserving energy.

How The Heat Pump Works



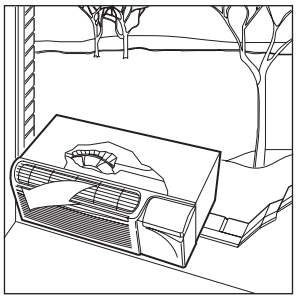
In Hot Weather:

Carrier's PTAC units provide indoor comfort in the same manner as conventional air conditioners, removing heat and humidity from indoor air. The heat and humidity is released to the outdoors. Carrier's high-efficiency design saves energy and reduces cooling costs.



In Cool Weather:

When the outdoor coil temperature is above 20 F (approximately 35 F outdoor-air temperature), the heat pump draws heat from outdoor air and uses it to heat indoor air. Since heat is transferred and not produced, Carrier's heat pump uses less electricity and reduces energy costs significantly.



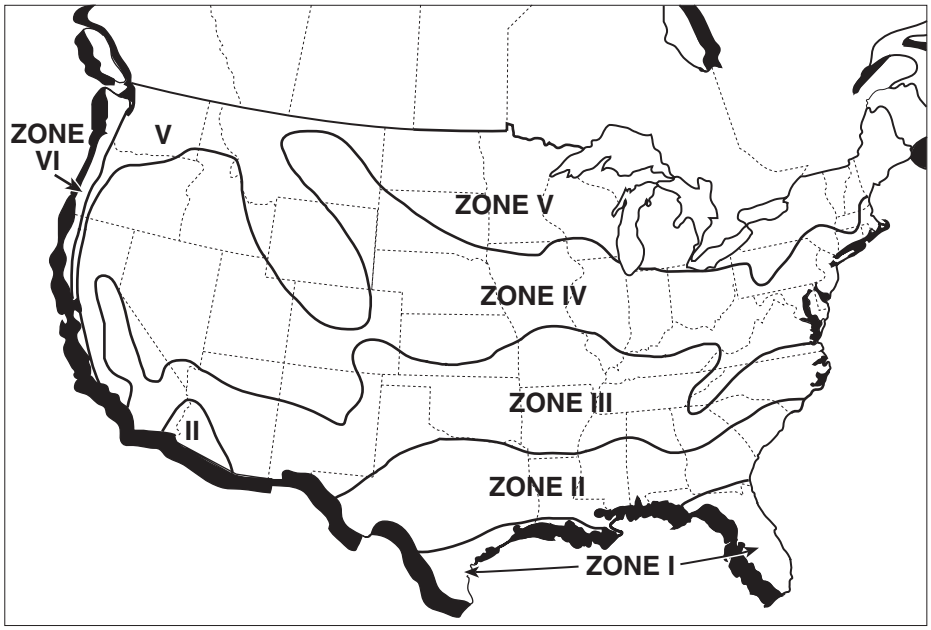
In Sub-Freezing Weather:

When the outdoor coil temperature falls below 20 F (approximately 35 F outdoor-air temperature), the unit automatically switches on a built-in electric heater. The compressor stops and a blower circulates warm air produced by the heater. When the outdoor coil temperature rises above 40 F, heat pump operation resumes automatically.

HEAT PUMP ENERGY SAVINGS

Heat pumps save more on operating costs during the heating cycle than heat/cool models. The table below shows that the higher initial cost of purchasing a heat pump is quickly made up in lower operating costs.

Use the map to identify the climate zone's designated number. Reading down the left-hand column of the table, select the cost/kWh rate in this zone that most closely approximates your local rate. The approximated savings and payback period is found at the intersection of your zone/rate line and the desired Btuh Cooling Capacity column. Exact savings are determined by lifestyle, local electrical rates, and climatic conditions.



CARRIER HEAT PUMP INITIAL COST VERSUS SAVINGS OVER HEAT/COOL MODELS

ZONE	ELECTRIC COST/kWH	7000 BTUH[1] COOLING CAPACITY	$60 PREMIUM	9000 BTUH[2] COOLING CAPACITY	$75 PREMIUM	12000 BTUH[2] COOLING CAPACITY	$90 PREMIUM	15000 BTUH[3] COOLING CAPACITY	$110 PREMIUM
		Annual Savings*	Payback in Months	Annual Savings*	Payback in Months	Annual Savings*	Payback in Months	Annual Savings*	Payback in Months
I	$.06	$ 34.26	21	$ 43.08	21	$ 58.20	19	$ 68.34	19
	$.08	$ 45.68	16	$ 57.44	16	$ 77.60	14	$ 91.12	14
	$.10	$ 57.10	13	$ 71.80	13	$ 97.00	11	$113.90	12
II	$.06	$ 57.12	13	$ 71.76	13	$ 96.96	11	$113.64	12
	$.08	$ 76.16	9	$ 95.68	9	$129.28	8	$151.52	9
	$.10	$ 95.20	8	$119.60	8	$161.60	7	$189.40	7
III	$.06	$ 58.02	12	$ 72.84	12	$ 98.40	11	$115.38	11
	$.08	$ 77.36	9	$ 97.12	9	$131.20	8	$153.84	9
	$.10	$ 96.70	7	$121.40	7	$164.00	7	$192.30	7
IV	$.06	$ 82.02	9	$103.02	9	$139.14	8	$163.14	8
	$.08	$109.36	7	$137.36	7	$185.52	6	$217.52	6
	$.10	$136.70	5	$171.70	5	$231.90	5	$271.90	5
	$.12	$164.04	4	$206.04	4	$278.28	4	$326.28	4
	$.14	$191.38	4	$240.38	4	$324.66	3	$380.66	3
	$.16	$218.72	3	$274.72	3	$371.04	3	$435.04	3
V	$.06	$ 57.36	13	$ 71.94	13	$ 97.26	11	$113.94	12
	$.08	$ 76.48	9	$ 95.92	9	$129.68	8	$151.92	9
	$.10	$ 95.60	8	$119.90	8	$162.10	7	$189.90	7
	$.12	$114.72	6	$143.88	6	$194.52	6	$227.88	6
	$.14	$133.84	5	$167.86	5	$272.33	4	$265.86	5
VI	$.06	$ 93.72	8	$117.66	8	$159.00	7	$186.48	7
	$.08	$124.96	6	$156.88	6	$212.00	5	$248.64	5
	$.10	$156.20	5	$196.10	5	$265.00	4	$310.80	4
	$.12	$187.44	4	$235.32	4	$318.00	3	$372.96	4

LEGEND

kWH — Kilowatt Hour

*Computer projections based on full cooling load at 95° F. Savings projected for 230 v ratings.

[1]Heating load is 5,000 Btuh at winter design point temperature.
[2]Heating load is 10,000 Btuh at winter design point temperature.
[3]Heating load is 15,000 Btuh at winter design point temperature.

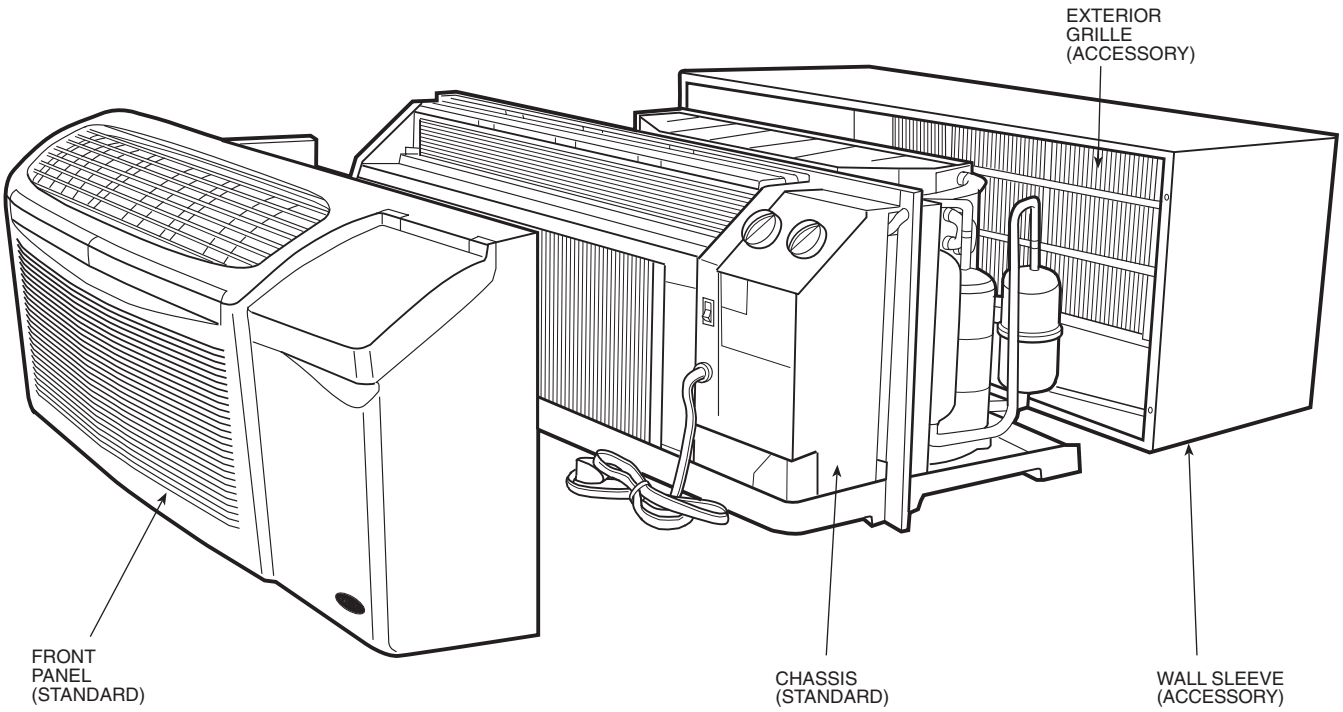
ORDERING DATA (52P AND 52C)

For immediate assistance, call 1-800-827-7435 or contact your local Carrier dealer.

Standard Unit

- Chassis with front panel
- Electro-mechanical controls
- Cord-connected chassis for 230/208-v and 265-v units

Lead-time: Many models are in stock for immediate delivery; call for lead-times.



Standard 52P or 52C Unit

PRODUCT CATALOG NUMBER

52 PE – 3 12 – – – 3 – – AA

Series Designation
PTAC (Packaged Terminal Air Conditioner)

Premier Series
PC – Cooling Only
PE – Cooling with Electric Heat
PQ – Heat Pump

Comfort Series
CE – Cooling with Electric Heat
CQ – Heat Pump

Electric Heater Size
2 – 2.3 kW
3 – 3.4 kW
5 – 5.0 kW

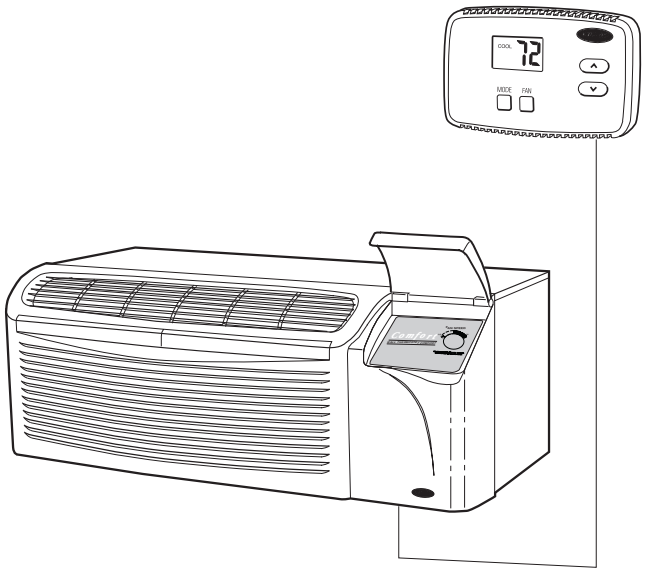
Cooling Capacity (nominal)
07 – 7,000 Btuh
09 – 9,000 Btuh
12 – 12,000 Btuh
15 – 15,000 Btuh

Chassis Options
AA – Standard
CP – Corrosion Protection
RC – Wall Thermostat Control (Not available on cooling only units)
RP – Wall Thermostat Control with Corrosion Protection (Not available on cooling only units)

Electrical Data
3 – 230/208-v, 60 Hz
4 – 265-v, 60 Hz

FACTORY-INSTALLED OPTIONS (52P AND 52C)

WALL THERMOSTAT CONTROL (RC,RP)



Carrier's wall thermostat control option includes:

- a standard chassis with front panel
- factory-installed low voltage controls for remote thermostat operation
- indoor coil freeze protection
- user accessible selector switch for high or low fan speed

A wall thermostat must be ordered separately.

See page 50 for a diagram of multiple PTAC units controlled by a single thermostat.

NOTE: Be sure to connect reversing valve wiring to the O connection of the thermostat for heat pump applications.

NOTE: Do not use a power stealing digital thermostat (common must be connected for digital thermostats).

CORROSION PROTECTION (CP,RP)

To protect against the corrosive effects of a seacoast environment, this option includes:

- a standard chassis with front panel
- special protections consisting of:
  - — painted control box and unit partitions
  - — pre-coated aluminum coils with copper tubing
  - — stainless steel tube sheets (outdoor coil)
  - — totally enclosed fan motor with moisture-resistant windings

NOTE: All installations within one mile of the sea coast or other corrosive environment must use Corrosion Protection (CP).

FIELD-INSTALLED ACCESSORIES (52P AND 52C)

WALL SLEEVES

Weather Last™ Wall Sleeve

For the best performance and longest life, Carrier recommends genuine Carrier wall sleeves for all installations.

All Carrier wall sleeves are built with a pitch of 1/4 in. per foot, for self pitching of the unit, the wall sleeve must be installed level. Overflow slots on the outside of the sleeve are in place to divert excess water during severe weather.

Important Sleeve Installation Considerations:

- All Carrier's sleeves are self pitching and must be mounted level in all directions. (Do not use rails to level sleeve.)
- The sleeve should be caulked on all sides, including both inside and outside the building.
- If more than 4 in. of wall sleeve projects into the room, an accessory subbase must be used for support.
- For all applications with an accessory subbase, wall sleeve must extend $3^1/_4$ in. minimum into room and must be $3^1/_4$ in. minimum to $5^1/_2$ in. maximum above floor (including carpeting) to allow for proper fit of subbase.
- For applications where the wall sleeve is mounted flush to the exterior of the building (or recessed in), Carrier recommends a field-supplied drip edge be installed to prevent water infiltration into the building.
- Insulated wall sleeves should be considered for superior sound absorption, to reduce heat loss and to prevent sleeve sweating, a condition that can occur when the outside temperature is cold and the indoor conditions are warm and humid.

Polymer Wall Sleeves

Choose a polymer wall sleeve for maximum protection and appearance.

All Carrier’s polymer wall sleeves are made from a molded polymer that is designed for strength and durability. This material has excellent corrosion resistance and a flammability rating of UL94-5V.

The sleeve surface is textured to prevent shine and hide scratches. The rib configuration on the sleeve bottom, allows easy chassis removal and aids in drainage. The locating holes in the side and top panels, allow easy fastening of the sleeve to wall openings. Refer to dimension drawings (pages 28 and 29) for typical wall installation and dimensions.

The sleeve's alpine mist color (a shade of beige) closely matches the front panel and blends in well with any inside or outside decor.

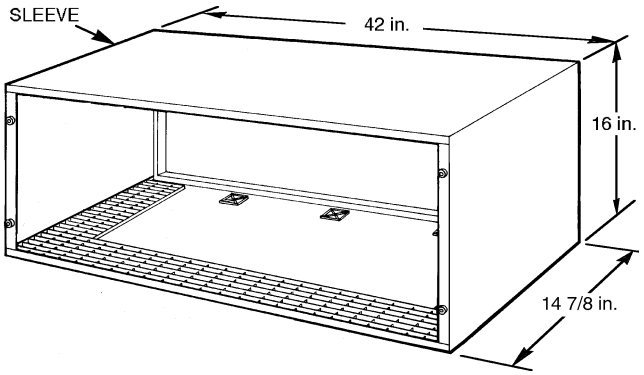
The polymer wall sleeve comes in both insulated (factory installed) or non-insulated, to meet the requirements of every application.

Insulated Polymer Wall Sleeve

Part No.: SLEEVE-INSUL-1PK

Carrier's accessory insulated polymer wall sleeve, with factory installed insulation, provides superior sound absorption, reduces heat loss and prevents sleeve sweating, a condition that can occur when the outside temperature is cold and the indoor conditions are warm and humid.

IMPORTANT: Insulated Polymer Wall sleeve provides superior sound absorption, reduces heat loss and prevents sleeve sweating.



Corrosion-Protected Polymer Sleeve

Non-Insulated Polymer Wall Sleeve

Part No.: WALL-SLEEVE-1PK

Part No.: WALL-SLEEVE-9PK

Carrier’s accessory non-insulated polymer wall sleeve, provides a superior appearance and protection for many applications.

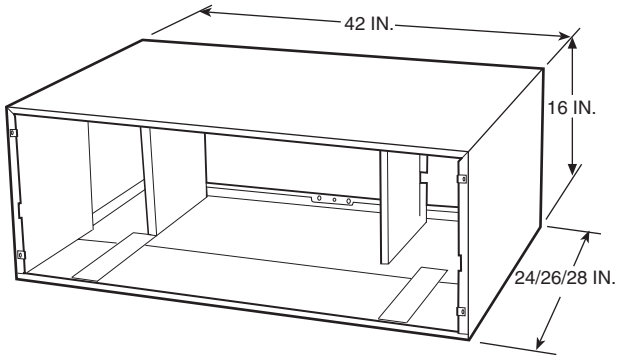
⚠ WARNING

For applications where weather conditions could influence sleeve sweating, a condition that can occur when the outside temperature is cold and the indoor conditions are warm and humid, the Insulated Polymer Wall sleeve should be considered.

Insulated Metal Wall Sleeves

Part No.: SLEEVE-STEEL-1PK
Part No.: SLEEVE-EXT24-1PK
Part No.: SLEEVE-EXT26-1PK
Part No.: SLEEVE-EXT28-1PK

Carrier's metal wall sleeves are available in a variety of sizes for most applications and difficult installations. Choose from $14^1/_2$″, 24″, 26″, or 28″ standard depth sizes. All metal wall sleeves come with factory-installed insulation, designed to minimize heat loss, reduce outdoor noise transmissions into the room and prevent sleeve sweating. In addition, the metal wall sleeve provides a flammability rating higher than UL94-5V.

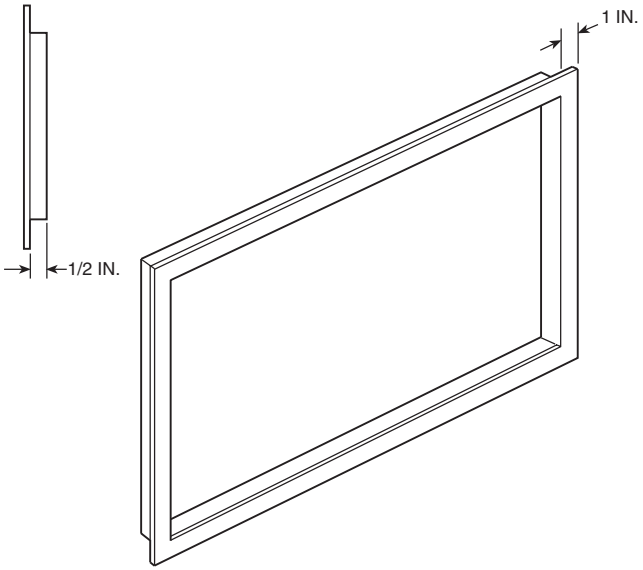


Extended Metal Wall Sleeve

Wall Sleeve Molding Kit

Part No.: SLEEVE-MOLDING

For a superior look and to hide any construction imperfections, use Carrier's wall sleeve molding kit to trim the wall sleeve to the wall. The molding kit is a perfect solution and can be used with any Carrier wall sleeve (matches Carrier wall sleeve color).

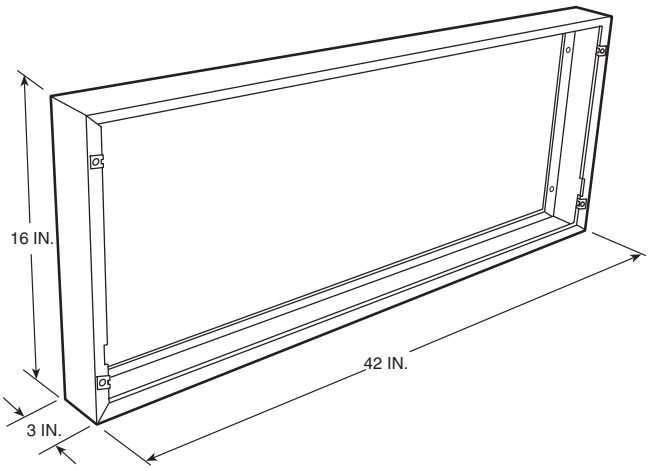


Wall Sleeve Molding Kit

Friedrich (and ZoneAire) Retrofit Wall Sleeve Adapter

Part No.: FR-SLEEVE-EXT

The Friedrich (and ZoneAire) wall sleeve adapter is constructed of sheet metal and is designed to increase the depth of an existing Friedrich T-series or ZoneAire wall sleeve to accommodate Carrier’s industry standard PTAC units.



Friedrich Wall Sleeve Adapter Kit

FIELD-INSTALLED ACCESSORIES (52P AND 52C) (cont)

OUTDOOR GRILLES

Carrier recommends only the use of Carrier-supplied grilles for use on the 52P and 52C series units. However, the architectural designs of a building may dictate the use of special or oversized grilles and/or louvers. Special louvers or any special architectural treatment of the building façade that may restrict free circulation of condenser airflow should be referred to Carrier Corporation for evaluation and approval.

Aluminum Architectural Outdoor Grilles (Louvered)

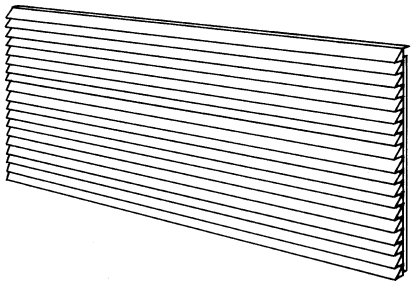
Part No.: GRILLE-ALU-CLEAR (anodized aluminum)
Part No.: GRILLE-ALU-WHITE
Part No.: GRILLE-ALU-BEIGE
Part No.: GRILLE-ALU-ALPIN (color matches Carrier wall sleeve)
Part No.: GRILLE-ALU-BRONZ
Part No.: GRILLE-ALU-MBRNZ
Part No.: GRILLE-ALU-BROWN
Part No.: GRILLE-ALU-LGREY
Part No.: GRILLE-ALU-SGREY
Part No.: GRILLE-ALU-PEACH
Part No.: GRILLE-ALU-MELON
Part No.: GRILLE-ALU-RDBRK
Part No.: GRILLE-ALU-BLUE
Part No.: GRILLE-ALU-GREEN

This premium line of decorative outdoor grilles will enhance the appearance of any building. The grilles are made of strong, durable, extruded, anodized aluminum and are designed to be mounted easily from inside the room. These elegant grilles have baked enamel finishes available in several colors. See inside of back cover for standard colors and color samples. For more information on custom colors and sizes, contact Reliable Products at 1-800-239-4621.

Polymeric Architectural Outdoor Grilles (Louvered)

Part No.: GRILLE-PLA-BROWN
Part No.: GRILLE-PLA-BEIGE
Part No.: GRILLE-PLA-ALPIN (color matches Carrier wall sleeve)

This value line of polymeric architectural outdoor grilles will blend attractively with most building exteriors. Mounted easily from inside the room, the one-piece, molded grille is designed for protection, enhanced appearance, and superior weather-resistance. The grille is made of durable polymer and has a color-fast, lightly-textured finish that blends well with most exterior finishes.

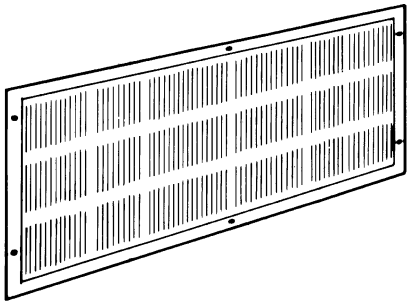


Architectural Grille in Aluminum or Polymeric

Standard Outdoor Aluminum Grille

Part No.: GRILLE-ALU-STAMP

This cost-effective, one-piece standard grille is made from durable anodized aluminum. The grille is lightweight, has a clear finish, and is easy to install from inside the room.



Standard Grille

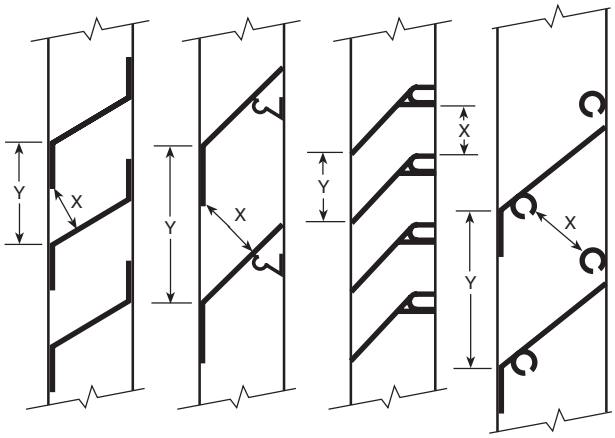
Outdoor Grille Selection

IMPORTANT: If you wish to use a grille not made by Carrier for your Carrier unit(s), contact the Carrier Application Engineering Group at 1-800-894-6449.

The following guidelines must be followed in the initial selection of any alternate exterior grille or louver:

1. The louver must have a minimum of 65% free area. Free area is the minimum area of the opening in an air inlet or outlet in which air can pass. Free Area (%) = X/Y.
2. The louver should be attached to the wall sleeve in a manner that will prevent recirculation of condenser discharge air into the inlet. In most applications, baffles, splitters, and/or gasket will be required between the chassis tube end sheets and the louver to prevent air recirculation.

The above criteria must be followed, since a louver that is restrictive or allows recirculation will result in a reduction of the unit's capacity and efficiency and will ultimately shorten the compressor life.



Louver Dimensional Reference

Sample Calculations

$$\text{Free Area (\%)} = \frac{x}{y} \times 100$$

$x = 1''$

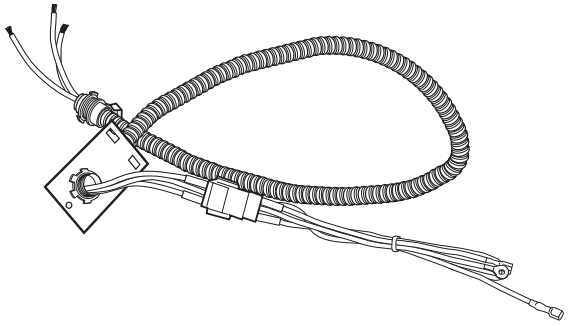
$y = 1.5''$

$$\text{F.A. (\%)} = \frac{1}{1.5} \times 100 = 66.7\%$$

Hardwire Kit

Part No.: HARDWIRE-KIT-1PK

This accessory hardwire kit provides a permanent connection to the unit. Electrical hard wiring is required when NEC (National Electrical Code) or local codes restrict the use of power cord and plug connections. The hardwire kit mounts on the front right side of the unit and comes with 36 inches of flexible steel conduit and a Molex connector for easy connect/disconnect.

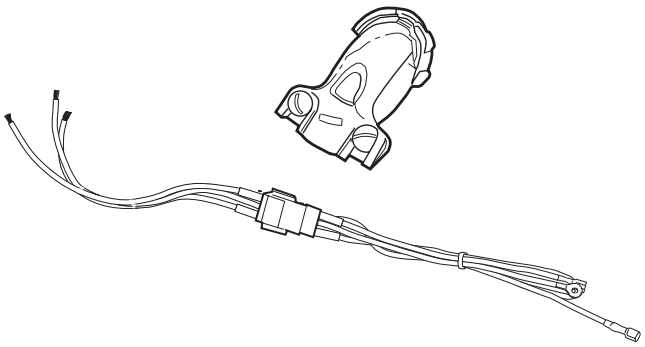


Hardwire Kit

Conduit Interface Kit

Part No.: CONDUIT-INTF-4PK

The conduit interface accessory kit provides the wire connection to the unit to interface to field-supplied conduit.



Conduit Interface Kit

FIELD-INSTALLED ACCESSORIES (52P AND 52C) (cont)

SUBBASE

Part No.: SUBBASE-NON-ELEC
Part No.: SUBBASE-230V-15A
Part No.: SUBBASE-230V-20A
Part No.: SUBBASE-230V-30A
Part No.: SUBBASE-265V-15A
Part No.: SUBBASE-265V-20A
Part No.: SUBBASE-265V-30A
Part No.: SUBBASE-HARDWIRE
Part No.: LEVELING-LEGS

This decorative subbase supports the unit and is available in three basic models: non-electrical, electrical, and hardwired.

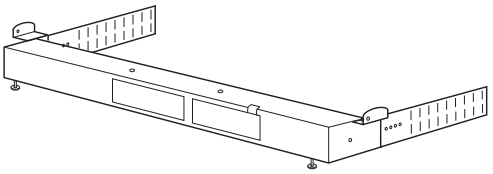
A subbase (or leveling legs) is required for installations where the wall sleeve extends 4 or more inches into the room or the wall is less than 2 in. thick. The minimum clearance between the bottom of the sleeve and the floor is $3^1/_4$ in., and the maximum clearance is $5^1/_2$ inches.

IMPORTANT: All standard cord-connected 265-v PTAC units will require a field-installed electrical subbase accessory per UL and NEC electrical codes.

All subbase models are pre-assembled, mount to the wall sleeve, and come with adjustable legs and side skirting to provide a finished appearance.

Non-electrical subbase

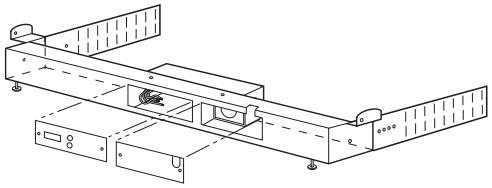
The easy to install, non-electrical subbase provides mechanical support and requires no wiring.



Non-Electrical Subbase Assembly

Electrical subbase

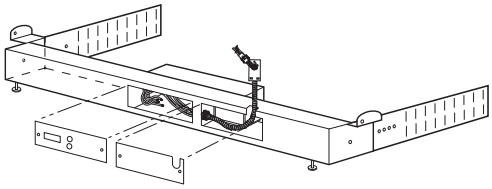
The electrical subbase has a factory-installed electrical junction box containing a receptacle for corded packaged terminal air conditioner (PTAC) units. The electrical subbase series offers models from 230-v, 15 amp up to 265-v, 30 amp. Knockouts are provided for power source connections.



Electrical Subbase Assembly

Hardwired subbase

The hardwired electrical subbase has a factory-installed junction box containing 19 in. of flexible conduit (for a perfect fit to the PTAC unit) and all mating connections for easy assembly to PTAC units. Knockouts are provided for power source connections.

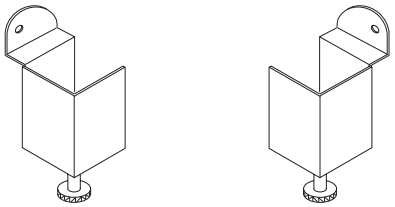


Hardwired Subbase Assembly

Leveling legs

Part No.: LEVELING-LEGS

Leveling legs attach easily to Carrier's wall sleeve and offer accurate leveling and support for units without a subbase. Leveling legs are adjustable from $3^1/_4$ in. to $5^1/_2$ in.

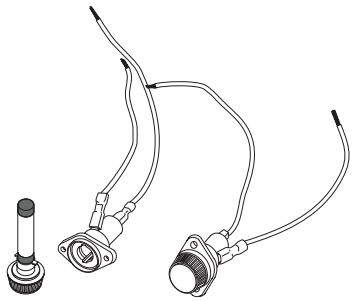


Leveling-Legs

Subbase Fuse Kit

Part No.: SUBBASE-FUSE-15A
Part No.: SUBBASE-FUSE-20A
Part No.: SUBBASE-FUSE-30A
The fuse kit provides in-line overcurrent protection at the unit when required by NEC (National Electric Code) or local codes.

IMPORTANT: The Fuse Kit can only be used with the electrical or hardwired subbase.



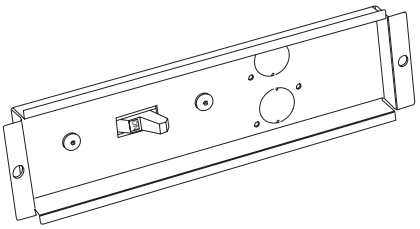
Subbase Fuse Kit

Subbase Power Disconnect Switch

Part No.: SUBBASE-SWITCH

The subbase power disconnect switch provides a recessed power disconnect for the PTAC unit when required by NEC or local codes.

IMPORTANT: This accessory can only be used with the electrical or hardwired subbase.



Power Disconnect Switch Assembly

FIELD-INSTALLED ACCESSORIES (52P AND 52C) (cont)

THERMOSTATS

Carrier's full line of wall thermostats are designed to enhance every PTAC application. Wall thermostats are simple and easy to use. Wall thermostats provide better temperature and humidity control as they can be placed in an optimal position in the room.

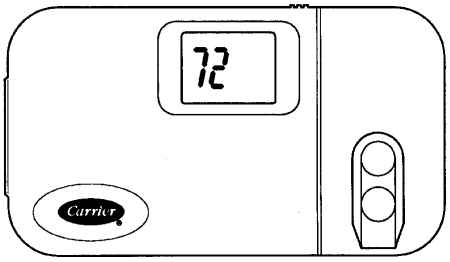
NOTE: See page 50 for a wiring diagram of multiple PTAC units controlled by one thermostat.

Digital Programmable Thermostat

Part No.: TSTATCCPAC01-B (for heat/cool models)

Part No.: TSTATCCPHP01-B (for heat pump models)

This microcomputer-controlled, 7-day programmable wall thermostat has enhanced features that provide automatic control for both heat pumps and heating/cooling units. It is used only on wall thermostat control (RC,RP) models.



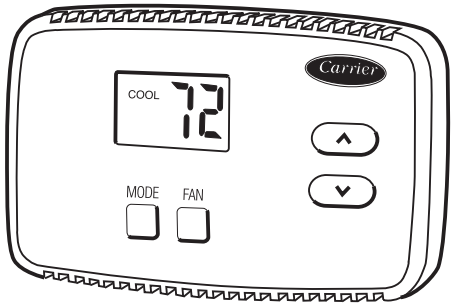
Programmable Thermostat

Non-Programmable Thermostat

Part No.: TSTATCCBPC01-B (for heat/cool models)

Part No.: TSTATCCBPH01-B (for heat pump models)

This low-voltage, easy-to-use non-programmable thermostat provides maximum guest comfort. This thermostat can only be used on wall thermostat (RC,RP) models.

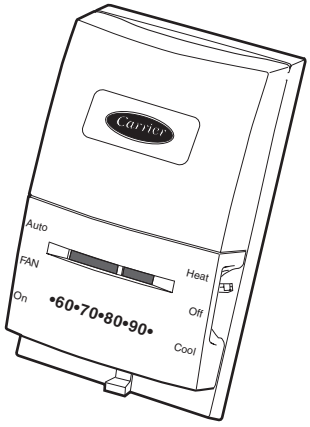


Non-Programmable Thermostat

Manual Changeover Wall Thermostat

Part No.: HH01AD045 (for heat/cool and heat pump models)

This manual changeover wall thermostat provides a reliable and consistent level of occupant temperature control for both heat pumps and heating/cooling units. The thermostat consists of a conventional vented cover and a coiled bimetal element. It is used only on wall thermostat control (RC,RP) models.



Manual Thermostat

Wall Thermostat Interface Retrofit Kit

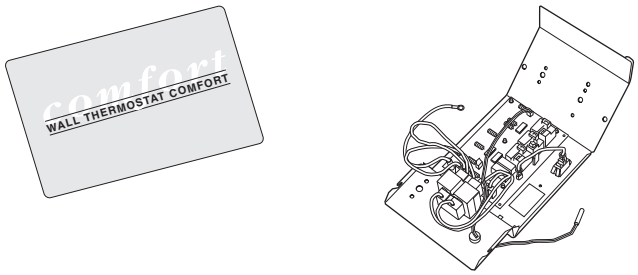
Part No.: RC-FIELDKIT230HC

Part No.: RC-FIELDKIT230HP

Part No.: RC-FIELDKIT265HC

Part No.: RC-FIELDKIT265HP

The Wall Thermostat Interface Retrofit Kit allows PTAC units with standard unit-mounted controls to be field converted for use with wall thermostat controls.

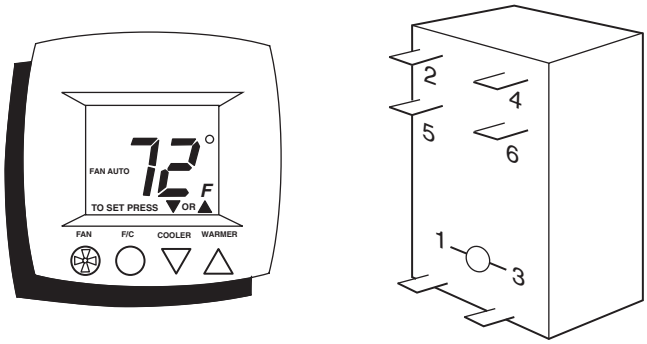


Wall Thermostat Interface Retrofit Kit

2-Speed Fan Control from Wall Thermostat

Part No.: 2SPEED-TSTAT-KIT

This kit includes an automatic heat/cool changeover thermostat and relay logic for allowing multiple fan speed control from the wall thermostat. The thermostat is simple to operate and install, and provides features designed for the lodging industry, such as, Hi and Low fan speed control, freeze guard, setpoint limits and large easy to read display.



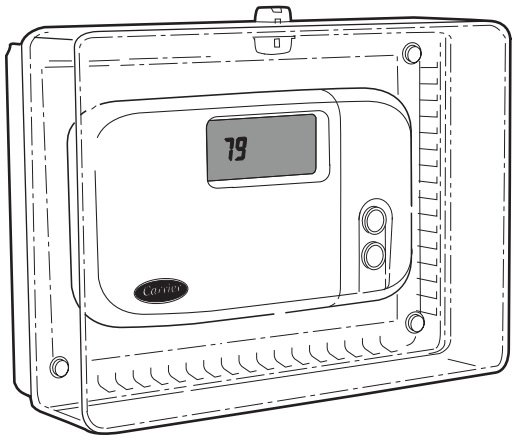
Auto Changeover Thermostat and Speed Control Relay

Thermostat Locking Cover

Part No.: TSTAT-COVER-6X7

Part No.: TSTAT-COVER-7X10

The thermostat locking cover prevents unauthorized access to the thermostat.



Thermostat Locking Cover

FIELD-INSTALLED ACCESSORIES (52P AND 52C) (cont)

Condensate Drain Kit

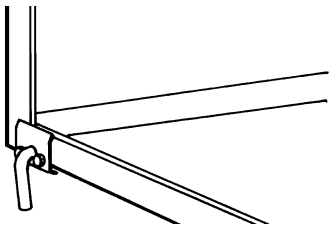
Part No.: DRAIN-KIT-4PK

This universal drain kit may be used internally or externally to route condensate to a drainage system. It can be field-installed on any Carrier wall sleeve.

Although Carrier's units are designed to dissipate all the condensate generated during normal cooling, there may be times when abnormal conditions cause more condensate than the unit can dissipate. If condensate that drips from the wall sleeve is objectionable, this internal/external drain kit should be installed.

The drain kit may be attached to the exterior right or left side of the wall sleeve for external draining or may be mounted to the room side of the wall sleeve for internal draining.

IMPORTANT: For internal drains installed in the plastic wall sleeve, the drain must be installed on the flat area of the sleeve. It cannot be installed in the wafer area.



Drain Kit

Lateral Duct Kit

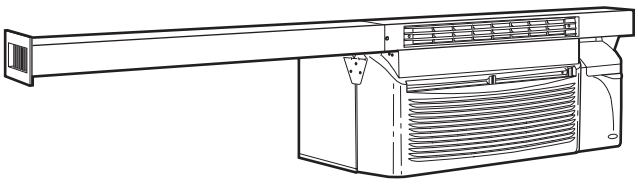
Part No.: LATERAL-DUCT (Adapter Plenum and Extension)

The accessory lateral duct kit allows one unit to heat or cool two rooms. The kit provides substantial savings for apartments, hotel suites, and office suites by eliminating the need for separate units for every room. The amount of air that can be diverted to an adjoining room is adjustable from 20 to 30 percent.

The lateral duct kit consists of two main components, the plenum and the extension duct. The kit mounts to the wall sleeve and allows either right or left side ducting. Consider the following when designing a ducted application.

- The maximum extension of the duct length is 4 feet.
- The duct run must be straight and horizontal; no bends or turns.
- The minimum recommended clearance between the unit and the adjoining room wall is 6 inches.
- You must provide for return air from the adjoining room.
- Carrier 52P and 52C units are not qualified for use with any other ducting scheme.

See page 31 for more information.



Lateral Duct Kit

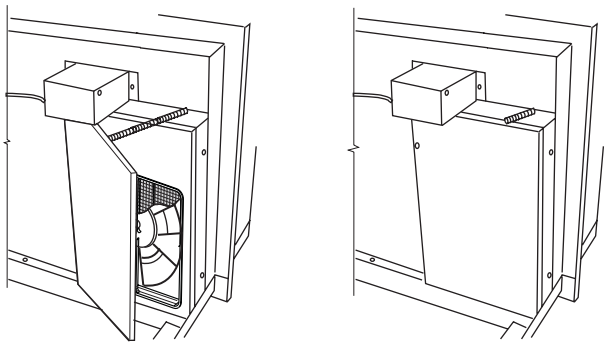
NOTES:

1. Lateral Duct Kit includes wall register for duct extension and a molding kit to trim the wall opening.
2. The sleeve should extend a minimum of 3-in. into the room to install mounting brackets.
3. The Lateral Duct Kit is not compatible with previous PTAC models.

Power Vent with Power Door Kit

Part No.: PWR-VENT-DOOR230
Part No.: PWR-VENT-DOOR265

Carrier's power vent kit, utilizing a specially designed fan, when installed in the unit's fresh air vent, will supply up to 95 CFM of outside air into the room. The power vent will only operate when the unit fan runs, and the unit will automatically open or close the vent door, depending on the operation of the fan. The kit comes pre-assembled from the factory and is very easy to install.



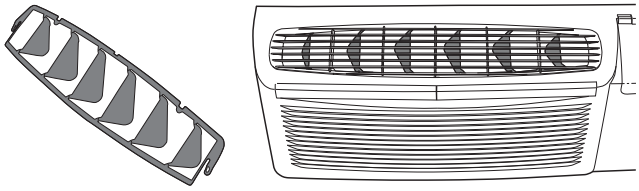
Power Vent with Door Kit

Lateral Air Deflector

Part No.: DEFLECTOR-1PK

Carrier’s exclusive lateral air deflector allows discharge air to be directed right or left in a room. This field-installed accessory is equipped with independently adjustable louvers to enhance air circulation. Lateral air deflectors are recommended for units mounted in a corner or off-center in a room.

NOTE: The lateral air deflector is not compatible with previous PTAC models.

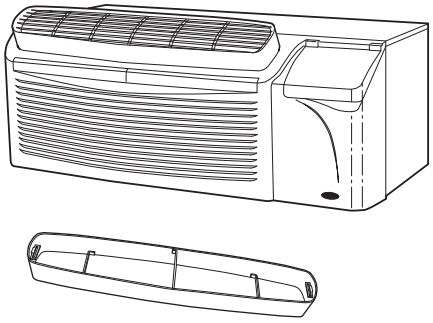


Accessory Air Deflector

Curtain Deflector

Part No.: CURTDFL-52CP-1PK

The curtain deflector is used to prevent curtains from being blown into the discharge air.

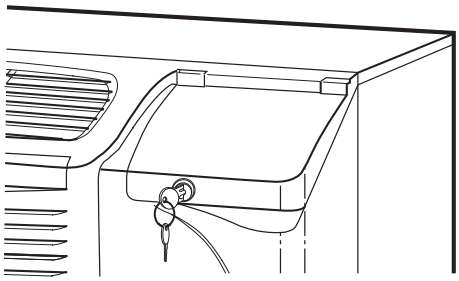


Curtain Deflector Kit

Security Door Kit

Part No.: SECURITY-DOOR

This key-locking security door kit prevents unauthorized access to the unit’s heating and cooling controls and prevents tampering with units in public locations and institutions. This field-installed accessory includes two matching keys and fits all Carrier 52P and 52C models. Keys are common to all Security Door kits.



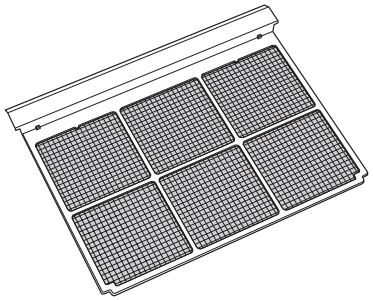
Security Door Kit

FIELD-INSTALLED ACCESSORIES (52P AND 52C) (cont)

Replacement Filters

Part No.: AIR-FILTER-10PK

The Carrier 52P and 52C model replacement air filters come in packages of 10. The filters save energy by preventing the evaporator coils from being plugged with dirt and lint. These economical and sturdy filters are interchangeable and may be washed, vacuumed, and reused.



Easily Replaceable Filters

Energy Management Kit

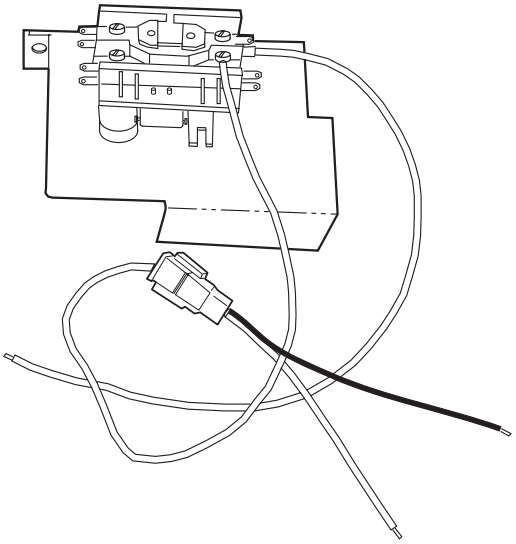
Part No.: EM-KIT

This field-installed accessory kit allows individual units to be turned on and off from a remote location.

The kit incorporates Carrier's Freeze Guard protection that prevents rooms from freezing during extreme or extended cold periods. Under these conditions, the Freeze Guard automatically disables front desk control and allows the unit to maintain a temperature of at least 50 F in the room. When the room reaches 65 F, the Freeze Guard feature returns the unit control to the front desk.

This kit interfaces to most energy management systems. When installed in locations other than the front desk, the kit can control unit operation by receiving signals from field-supplied devices such as motion sensors or heat sensing detectors.

Control devices connected to the Energy Management Kit must have normally open sets of contacts (when the switch is open, the unit operates). A 24-volt transformer must be field supplied and connected to the Energy Management Kit. (See typical wiring diagram on page 49.)



Energy Management Kit

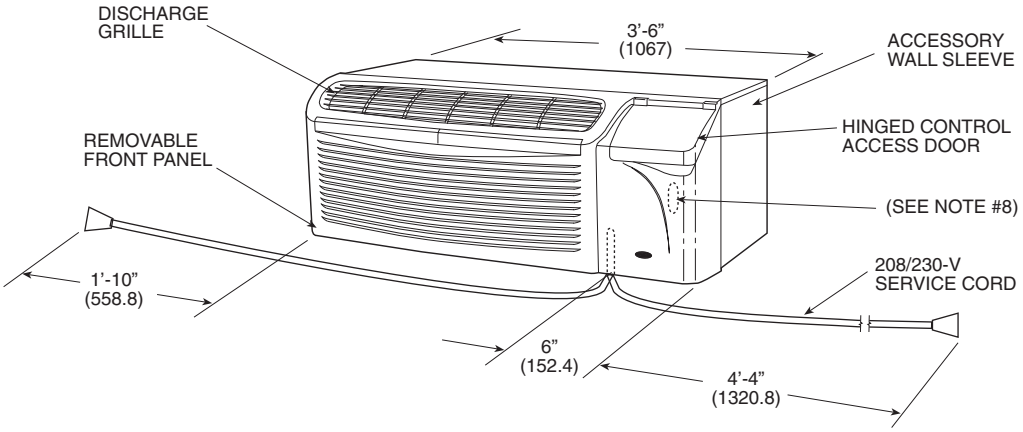
DIMENSION DRAWINGS AND INSTALLATION DATA — NEW CONSTRUCTION

TYPICAL WALL INSTALLATION

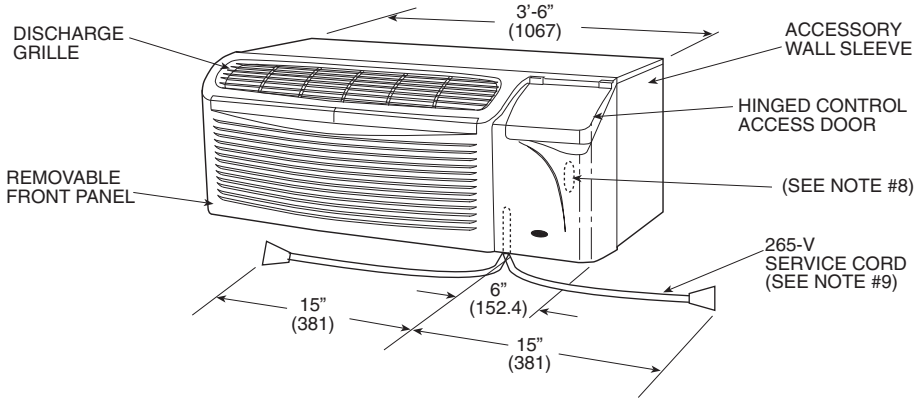
Proper building practices must be used when constructing a wall opening to support a PTAC wall sleeve and chassis.

If practices are unknown, consult your local architect or building contractor.

Installed wall sleeve must be level from side to side and front to back.



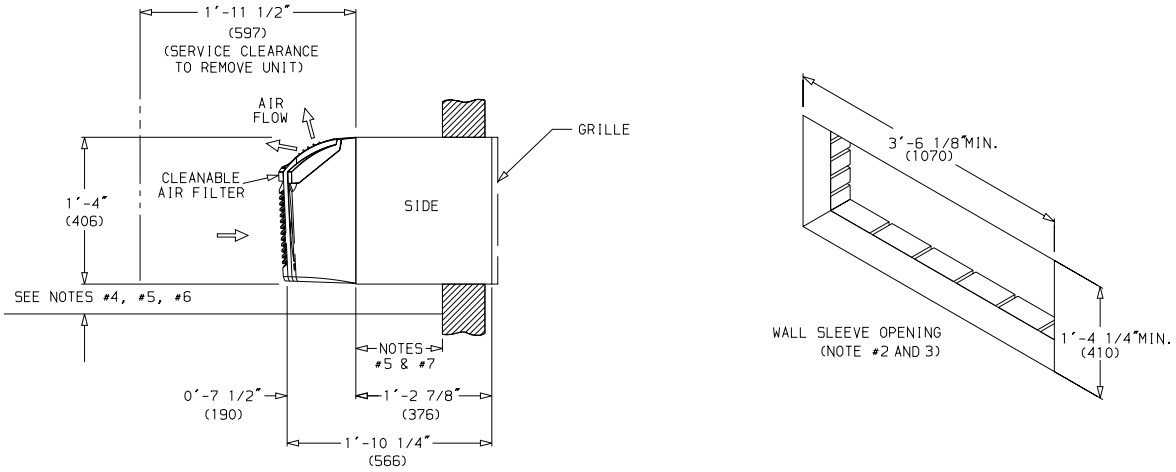
208/230-V UNITS



265-V UNITS

NOTES:

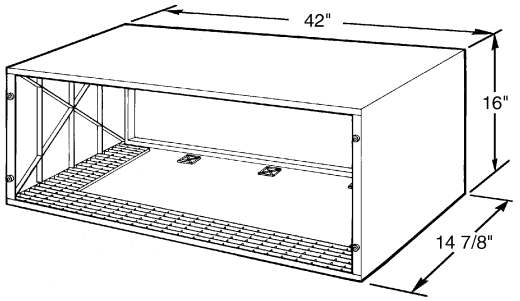
1. Dimensions in parenthesis are in millimeters.
2. Minimum opening sizes apply to all wall openings.
3. Proper building practices must be used when constructing a wall opening to support a PTAC wall sleeve and chassis. If practices are unknown consult your local architect or building contractor.
4. Installed wall sleeve must be level from side to side and front to back (do not use rails to level sleeve).
5. If wall sleeve extends into the room more than 4-in., an accessory subbase or field fabricated front support should be used to prevent wall sleeve from tipping forward.
6. For all applications with an accessory subbase, wall sleeve must extend into room $3^1/_4$-in. (83 mm) minimum and $3^1/_4$-in. (83 mm) minimum from floor.
7. For all applications with an accessory lateral duct, sleeve must extend into the room 3-in. (76.2 mm) minimum. In applications where the sleeve will not extend a minimum 3-in., the lateral duct mounting brackets must be mounted on the wall sleeve prior to wall sleeve installation.
8. Remote control models, "RC" and "RP" units, use low voltage connections (24 volt AC).
9. 265 volt cord connected units must plug into a 265 volt electrical subbase per UL requirement (or hardwire can be used).
10. The 265 volt electrical cord is approximately 15-in. long from where it exits the front panel.



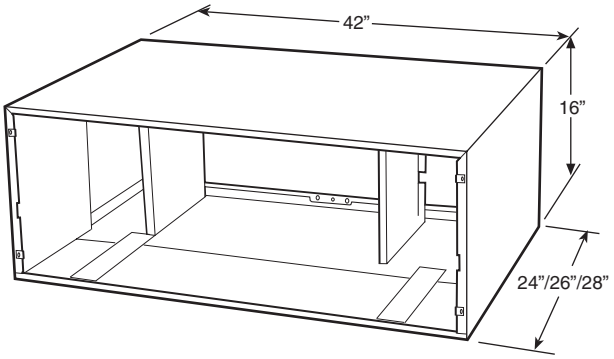
52P and 52C Dimension Drawing

DIMENSION DRAWINGS AND INSTALLATION DATA — NEW CONSTRUCTION (cont)

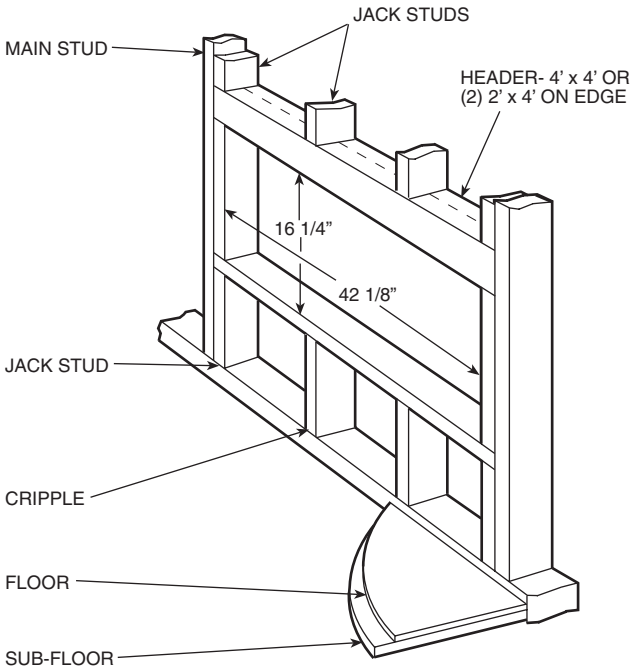
WALL SLEEVE MOUNTING DIMENSIONS FORSTANDARD AND ACCESSORY GRILLES



Standard Polymer Non-Insulated Wall Sleeve
Standard Polymer Insulated Wall Sleeve
Standard Metal Insulated Wall Sleeve



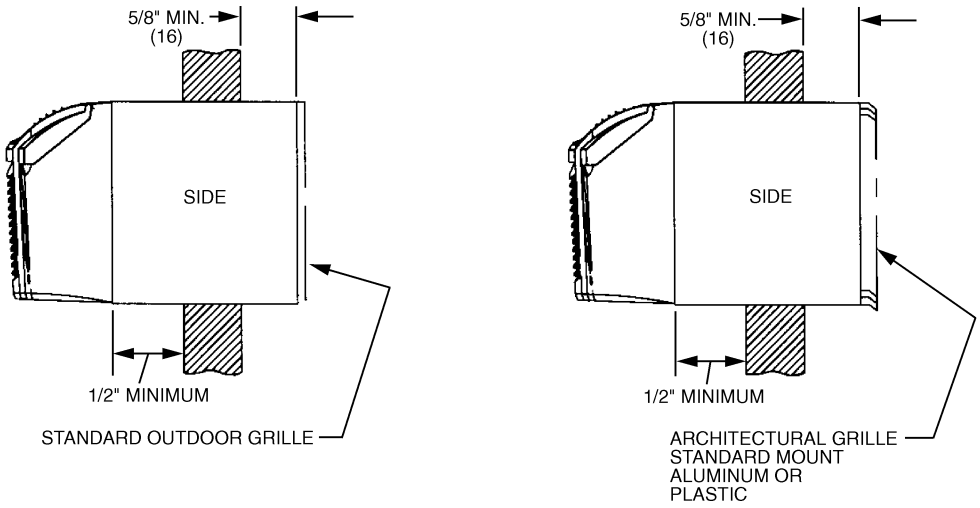
Extended Metal Insulated Wall Sleeve



Framing and Minimum Wall Sleeve Opening

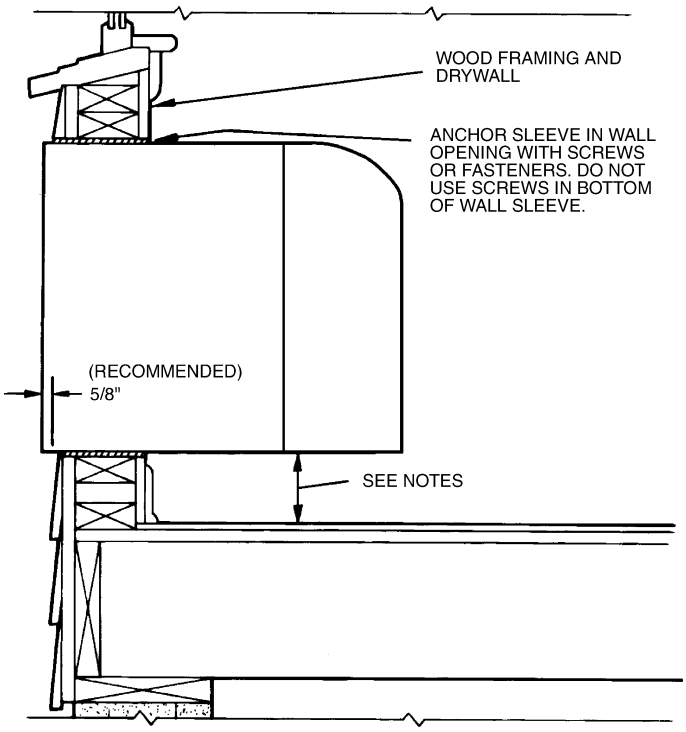
NOTES (ALL SLEEVES):

1. Never install fasteners through bottom of sleeve.
2. Never use rails to level sleeve.



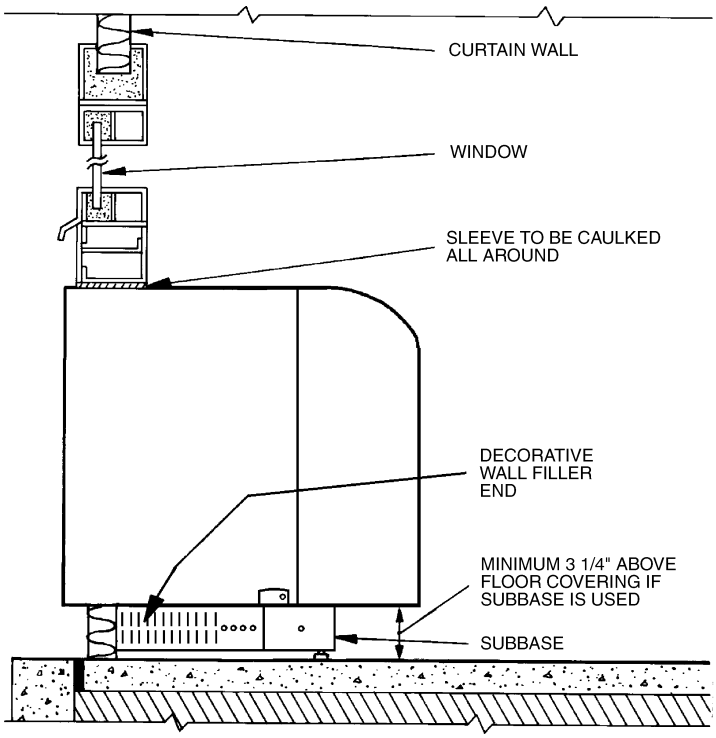
Wall Sleeve Mounting (All Models)

TYPICAL WALL INSTALLATION


WOOD FRAMING AND DRYWALL
ANCHOR SLEEVE IN WALL OPENING WITH SCREWS OR FASTENERS. DO NOT USE SCREWS IN BOTTOM OF WALL SLEEVE.
(RECOMMENDED) 5/8"
SEE NOTES

NOTES:
1. Sleeve may be flush mounted to floor, but front panel may have to be notched to accommodate service cord.
2. If more than 4 in. of sleeve projects into room, an accessory subbase must be used for support.
3. For walls 2 in. thick or less, an accessory subbase must be used for support.
4. Caulk around sleeve on both indoor and outdoor sides.

Typical Wall Sleeve Installation


CURTAIN WALL
WINDOW
SLEEVE TO BE CAULKED ALL AROUND
DECORATIVE WALL FILLER END
MINIMUM 3 1/4" ABOVE FLOOR COVERING IF SUBBASE IS USED
SUBBASE

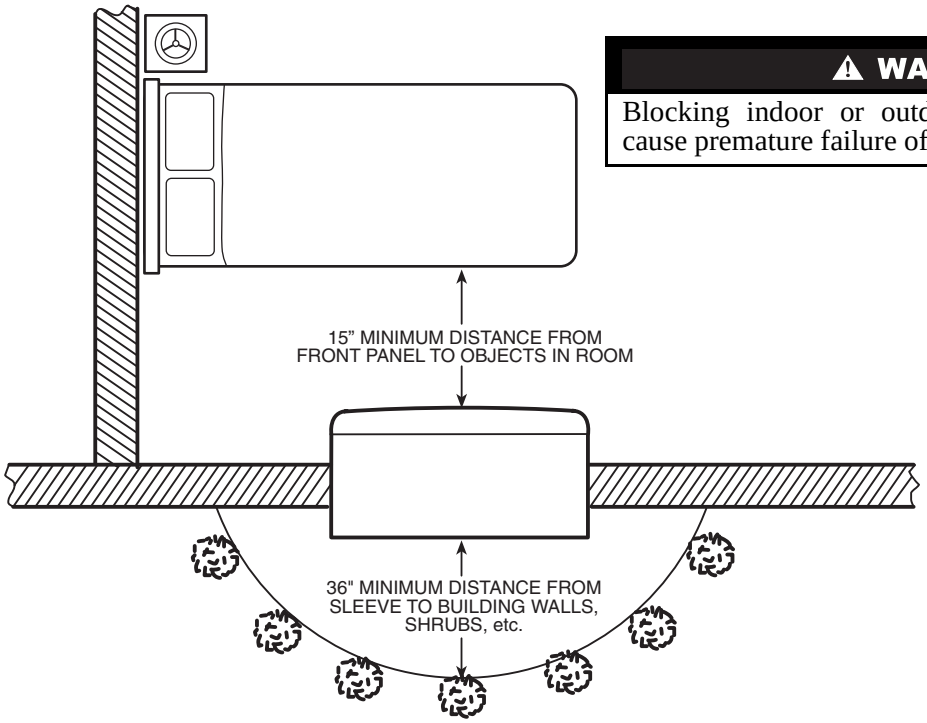
Typical Curtain Wall Installation (All Models)

DIMENSION DRAWINGS AND INSTALLATION DATA — NEW CONSTRUCTION (cont)

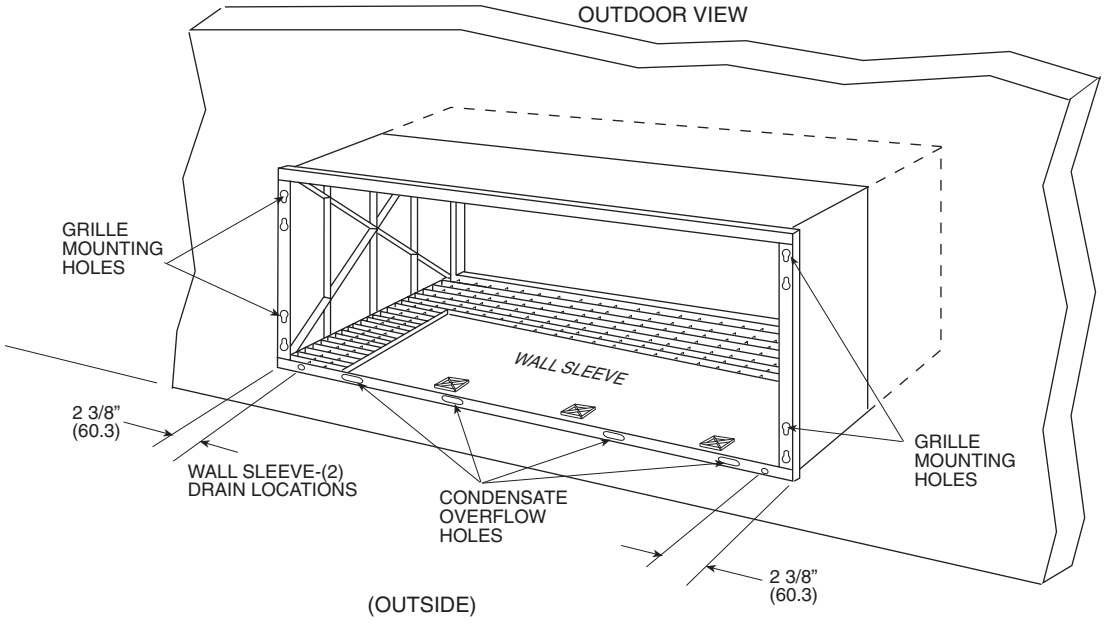
MINIMUM CLEARANCE FOR INDOOR AND OUTDOOR DISCHARGE AIR

⚠ WARNING

Blocking indoor or outdoor discharge air could cause premature failure of unit.

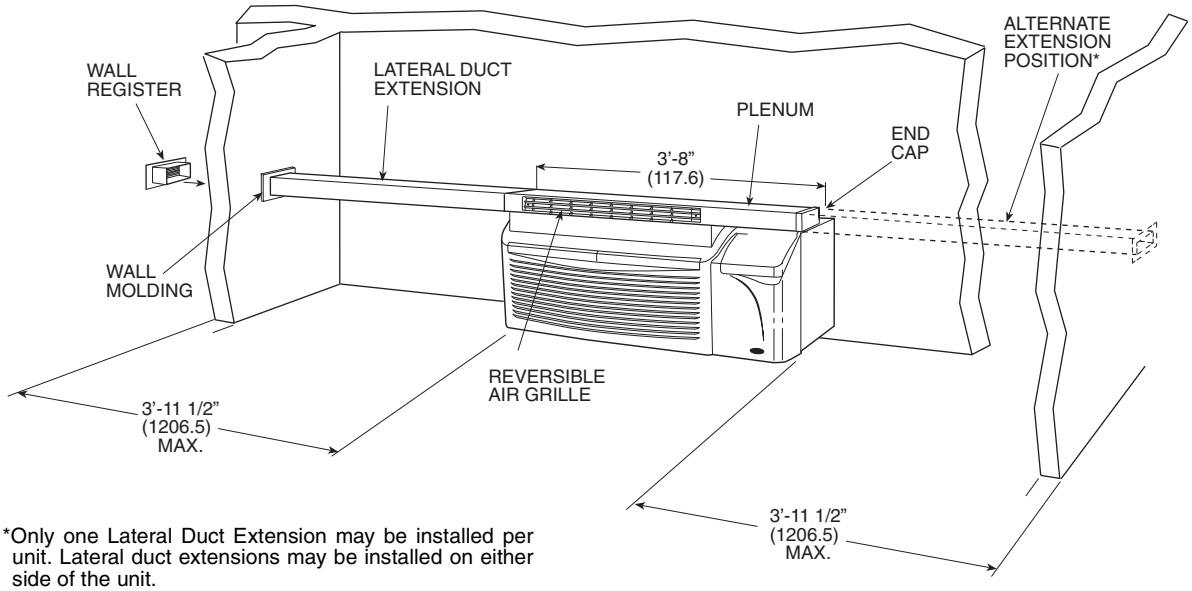


52P and 52C Indoor and Outdoor Discharge Air Circulation

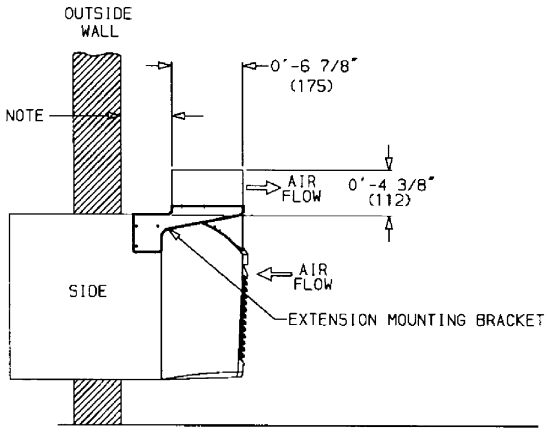


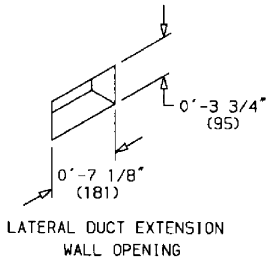
Back of Polymer Wall Sleeve

TYPICAL LATERAL DUCT INSTALLATION



*Only one Lateral Duct Extension may be installed per unit. Lateral duct extensions may be installed on either side of the unit.



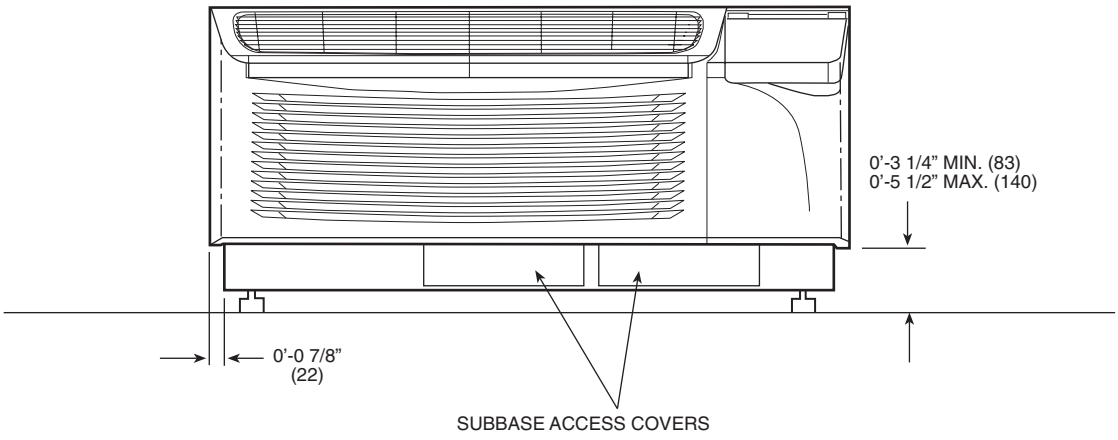


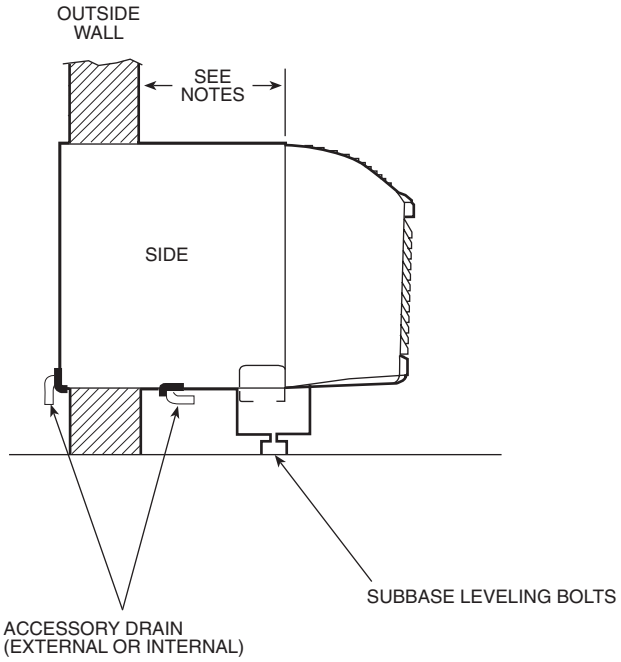
NOTE: For all applications with an accessory lateral duct, sleeve must extend into the room a minimum of 3 inches. In applications where the sleeve will not extend a minimum of 3 in., the lateral duct mounting brackets will need to be mounted on the sleeve prior to installation to the wall.

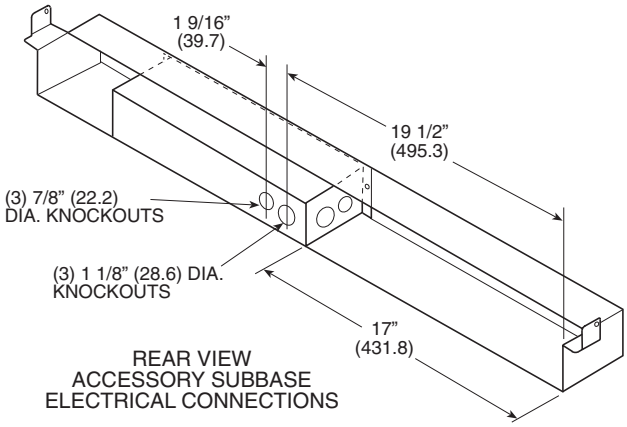
52P and 52C Lateral Duct

DIMENSION DRAWINGS AND INSTALLATION DATA — NEW CONSTRUCTION (cont)

52P AND 52C WITH SUBBASE



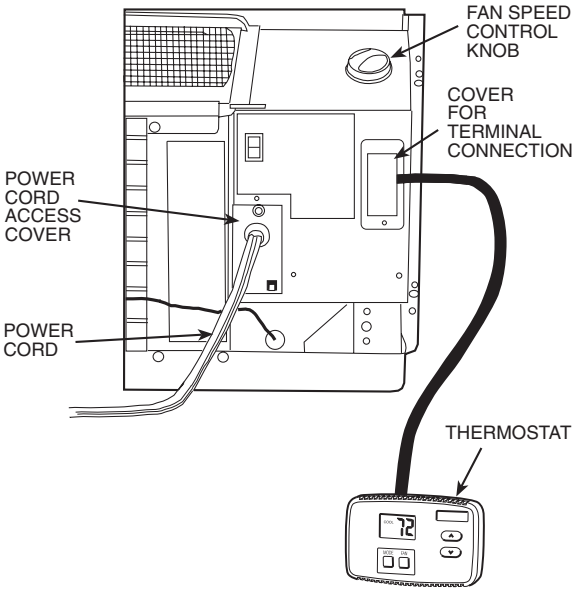




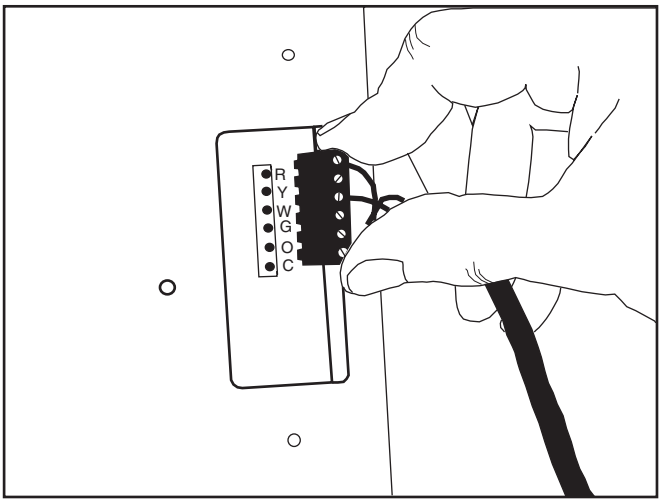
NOTES:
1. Accessory subbase is required for applications where:
   - Wall sleeve extends 4 or more inches into the room.
   - Wall thickness is less than 2 inches.
   - All 265-v cord-connected applications.
2. For all applications with an accessory subbase:
   - Wall sleeve must extend 4 in. minimum into the room and $3^1/_4$ in. minimum above the floor.
   - Subbase height is adjustable from $3^1/_4$ in. minimum to $5^1/_2$ in. maximum above floor (including carpeting).

   Refer to wall sleeve installation instructions.

WALL THERMOSTAT CONNECTIONS



Control Box Terminal Cover for Wall Thermostat Models



Terminal Connector Removal and Replacement

PRODUCT DATA (52P)

PERFORMANCE AND ELECTRICAL DATA

MODEL 52PQ (230/208-1-60)

MODEL NUMBER 52PQ	CAPACITY* (Btuh)			HEATER kW	EER	COP†	VOLTAGE RANGE (Volts)	AMPS		WATTS	
	Cooling	Heating						Cooling	Heating**	Cooling	Heating
		Rev. Cyc.	Electric								
207---3	7,200/ 7,100	6,300/ 6,300	7,800/ 6,400	2.3	12.7/12.7	3.4/3.4	187-253	2.7/2.9	10.4/ 9.5	567/ 559	2393/1985
307---3	7,200/ 7,100	6,300/ 6,300	11,600/ 9,700	3.4	12.7/12.7	3.4/3.4		2.7/2.9	15.2/14.1	567/ 559	3493/2935
209---3	9,100/ 9,000	7,900/ 7,900	7,800/ 6,400	2.3	11.5/11.5	3.2/3.2		3.7/3.8	10.4/ 9.5	791/ 783	2393/1985
309---3	9,100/ 9,000	7,900/ 7,900	11,600/ 9,700	3.4	11.5/11.5	3.2/3.2		3.7/3.8	15.2/14.1	791/ 783	3493/2935
212---3	12,100/12,000	11,000/11,000	7,800/ 6,400	2.3	11.1/10.7	3.2/3.2		4.8/5.3	10.8/ 9.9	1090/1122	2470/2047
312---3	12,100/12,000	11,000/11,000	11,600/ 9,700	3.4	11.1/10.7	3.2/3.2		4.8/5.3	15.6/14.5	1090/1122	3570/2997
512---3	12,100/12,000	11,000/11,000	17,000/13,600	5.0	11.1/10.7	3.2/3.2		4.8/5.3	22.5/20.0	1090/1122	5170/4147
215---3	14,800/14,300	14,100/13,500	7,800/ 6,400	2.3	9.7/ 9.5	3.0/3.0		6.5/7.1	10.8/ 9.9	1526/1505	2470/2047
315---3	14,800/14,300	14,100/13,500	11,600/ 9,700	3.4	9.7/ 9.5	3.0/3.0		6.5/7.1	15.6/14.5	1526/1505	3570/2997
515---3	14,800/14,300	14,100/13,500	17,000/13,600	5.0	9.7/ 9.5	3.0/3.0		6.5/7.1	22.5/20.0	1526/1505	5170/4147

MODEL NUMBER 52PQ	POWER FACTOR (%)	FAN MOTOR			MAX FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEP-TACLE TYPE	R-22 CHARGE (oz)	DEHUMIDIFI-CATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. CHASSIS SHIP WT. (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI††							
207---3	100	0.075	0.44	220/260	15	13.0	A	24	1.5	0.78	125
307---3					20	19.0	B				
209---3	99	0.075	0.44	220/260	15	13.0	A	24	2.4	0.73	125
309---3					20	19.0	B				
212---3	99	0.125	0.75	270/350	15	13.3	A	34	3.4	0.71	140
312---3					20	19.3	B				
512---3					30	27.9	C				
215---3	99	0.125	0.75	250/320	15	13.4	A	32	4.6	0.67	150
315---3					20	19.4	B				
515---3					30	28.0	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 380-93.
†Coefficient of Performance (COP) at 47 F outdoor ambient temperature.
**Electric resistance heater power and fan motor power.
††Fan motor indoor CFM (LO/HI) shown for 230-1-60 units.

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	230/208		
OUTLET RATED VOLTS/AMPS	250/15	250/20	250/30
OUTLET BLADE CONFIGURATION	A	B	C
NEMA CONFIGURATION	6-15R	6-20R	6-30R
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20*	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration
NEMA — National Electrical Manufacturers Association

*May be used for 15-amp applications if fused for 15 amps.

PERFORMANCE AND ELECTRICAL DATA

MODEL 52PQ (265-1-60)

MODEL NUMBER 52PQ	CAPACITY* (Btuh)			HEATER kW	EER	COP†	VOLTAGE RANGE	AMPS		WATTS	
	Cooling	Heating						Cooling	Heating**	Cooling	Heating
		Rev. Cycle	Electric								
207---4	7,200	6,300	7,800	2.3	12.3	3.4	239-292	2.4	9.2	585	2396
307---4	7,200	6,300	11,600	3.4	12.3	3.4		2.4	13.3	585	3496
209---4	9,100	7,700	7,800	2.3	11.5	3.2		3.1	9.2	791	2396
309---4	9,100	7,700	11,600	3.4	11.5	3.2		3.1	13.3	791	3496
212---4	12,100	10,800	7,800	2.3	11.1	3.2		4.2	9.4	1090	2470
312---4	12,100	10,800	11,600	3.4	11.1	3.2		4.2	13.5	1090	3570
512---4	12,100	10,800	17,000	5.0	11.1	3.2		4.2	19.6	1090	5170
215---4	14,700	14,100	7,800	2.3	9.7	3.0		5.7	9.4	1515	2470
315---4	14,700	14,100	11,600	3.4	9.7	3.0		5.7	13.5	1515	3570
515---4	14,700	14,100	17,000	5.0	9.7	3.0		5.7	19.6	1515	5170

MODEL NUMBER 52PQ	POWER FACTOR %	FAN MOTOR			MAX. FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEPTACLE TYPE††	R-22 CHARGE (oz)	DEHUMIDIFICATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. CHASSIS SHIP WT (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI							
207---4	97	0.075	0.46	220/260	15	11.3	A	26	1.5	0.78	125
307---4					20	16.5	B				
209---4	97	0.075	0.46	220/260	15	11.3	A	24	2.4	0.73	125
309---4					20	16.5	B				
212---4	99	0.125	0.71	270/340	15	11.6	A	34	3.4	0.71	140
312---4					20	16.7	B				
512---4					25	24.3	C				
215---4	96	0.125	0.71	250/320	15	11.9	A	33	4.6	0.67	150
315---4					20	17.0	B				
515---4					25	24.6	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 380-93.
†Coefficient of Performance (COP) at 47 F outdoor ambient temperature.
**Electric resistance heater power and fan motor power.
††All 265-v units require an electrical subbase (receptacle or hard-wire model).

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	265		
OUTLET RATED VOLTS/AMPS	277/15	277/20	277/30
OUTLET BLADE CONFIGURATION	A	B	C
NEMA CONFIGURATION	7-15R	7-20R	7-30R
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration
NEMA — National Electrical Manufacturers Association

PRODUCT DATA (52P) (cont)

PERFORMANCE AND ELECTRICAL DATA

MODEL 52PC AND PE (230/208-1-60)

52PC performance and electrical data is the same as 52PE without electric heat.

MODEL NUMBER 52PE	CAPACITY* (Btuh)		HEATER kW	EER	VOLTAGE RANGE (Volts)	AMPS		WATTS	
	Cooling	Heating				Cooling	Heating†	Cooling	Heating
207---3	7,200/ 7,100	7,800/ 6,400	2.3	12.7/12.7	187-253	2.7/2.9	10.4/ 9.5	567/ 559	2393/1985
307---3	7,200/ 7,100	11,600/ 9,700	3.4	12.7/12.7		2.7/2.9	15.2/14.1	567/ 559	3493/2935
209---3	9,100/ 9,000	7,800/ 6,400	2.3	11.5/11.5		3.7/3.8	10.4/ 9.5	791/ 783	2393/1985
309---3	9,100/ 9,000	11,600/ 9,700	3.4	11.5/11.5		3.7/3.8	15.2/14.1	791/ 783	3493/2935
212---3	12,100/12,000	7,800/ 6,400	2.3	11.1/10.7		4.8/5.3	10.8/ 9.9	1090/1122	2470/2047
312---3	12,100/12,000	11,600/ 9,700	3.4	11.1/10.7		4.8/5.3	15.6/14.5	1090/1122	3570/2997
512---3	12,100/12,000	17,000/13,600	5.0	11.1/10.7		4.8/5.3	22.5/20.0	1090/1122	5170/4147
215---3	15,000/14,700	7,800/ 6,400	2.3	9.8/ 9.8		6.4/7.1	10.8/ 9.8	1531/1500	2470/2047
315---3	15,000/14,700	11,600/ 9,700	3.4	9.8/ 9.8		6.4/7.1	15.6/14.5	1531/1500	3570/2997
515---3	15,000/14,700	17,000/13,600	5.0	9.8/ 9.8		6.4/7.1	22.5/20.0	1531/1500	5170/4147

MODEL NUMBER 52PE	POWER FACTOR (%)	FAN MOTOR			MAX. FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEP-TACLE TYPE	R-22 CHARGE (oz)	DEHUMIDIFI-CATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. SHIP WT. (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI**							
207---3	100	0.075	0.44	220/260	15	13.0	A	24	1.5	0.78	125
307---3					20	19.0	B				
209---3	99	0.075	0.44	220/260	15	13.0	A	24	2.4	0.73	125
309---3					20	19.0	B				
212---3	99	0.125	0.75	270/350	15	13.3	A	34	3.4	0.71	140
312---3					20	19.3	B				
512---3					30	27.9	C				
215---3	95	0.125	0.75	250/320	15	13.4	A	32	4.8	0.66	150
315---3					20	19.4	B				
515---3					30	28.0	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 310-93.

†Electric resistance heater power and fan motor power.

**Fan motor indoor CFM (LO/HI) shown for 230-1-60 units.

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	230/208		
OUTLET RATED VOLTS/AMPS	250/15	250/20	250/30
OUTLET BLADE CONFIGURATION	A	B	C
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20*	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration

NEMA — National Electrical Manufacturers Association

*May be used for 15-amp applications if fused for 15 amps.

PERFORMANCE AND ELECTRICAL DATA

MODEL 52PC AND PE (265-1-60)

52PC performance and electrical data is the same as 52PE without electric heat.

MODEL NUMBER 52PE	CAPACITY* (Btuh)		HEATER kW	EER	VOLTAGE RANGE (Volts)	AMPS		WATTS	
	Cooling	Heating				Cooling	Heating†	Cooling	Heating
207---4	7,200	7,800	2.3	12.7	239-292	2.4	9.2	567	2396
307---4	7,200	11,600	3.4	12.7		2.4	13.3	567	3496
209---4	9,100	7,800	2.3	11.5		3.1	9.2	791	2396
309---4	9,100	11,600	3.4	11.5		3.1	13.3	791	3496
212---4	12,100	7,800	2.3	11.1		4.2	9.4	1090	2470
312---4	12,100	11,600	3.4	11.1		4.2	13.5	1090	3570
512---4	12,100	17,000	5.0	11.1		4.2	19.6	1090	5170
215---4	15,100	7,800	2.3	10.0		5.7	9.4	1510	2470
315---4	15,100	11,600	3.4	10.0		5.7	13.5	1510	3570
515---4	15,100	17,000	5.0	10.0		5.7	19.6	1510	5170

MODEL NUMBER 52PE	POWER FACTOR %	FAN MOTOR			MAX. FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEP-TACLE TYPE**	R-22 CHARGE (oz)	DEHUMIDI-FICATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. CHASSIS SHIP WT. (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI							
207---4	97	0.075	0.46	220/260	15	11.3	A	26	1.5	0.78	125
307---4					20	16.5	B				
209---4	97	0.075	0.46	220/260	15	11.3	A	24	2.4	0.73	125
309---4					20	16.5	B				
212---4	99	0.125	0.71	270/340	15	11.6	A	34	3.4	0.71	140
312---4					20	16.7	B				
512---4					25	24.3	C				
215---4	100	0.125	0.71	250/320	15	11.9	A	32	5.0	0.66	150
315---4					20	17.0	B				
515---4					25	24.6	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 310-93.

†Electric resistance heater power and fan motor power.

**All 265-v units require an electrical subbase (receptacle or hard-wire model).

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	265		
OUTLET RATED VOLTS/AMPS	277/15	277/20	277/30
OUTLET BLADE CONFIGURATION	A	B	C
NEMA CONFIGURATION	7-15R	7-20R	7-30R
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration

NEMA — National Electrical Manufacturers Association

PRODUCT DATA (52C)

PERFORMANCE AND ELECTRICAL DATA

MODEL 52CQ (230/208-1-60)

MODEL NUMBER 52CQ	CAPACITY* (Btuh)			HEATER kW	EER	COP†	VOLTAGE RANGE (Volts)	AMPS		WATTS	
	Cooling	Heating						Cooling	Heating**	Cooling	Heating
		Rev. Cyc.	Electric								
207---3	7,000/ 6,900	6,100/ 6,000	7,800/ 6,400	2.3	11.1/11.1	3.1/3.1	187-253	2.7/2.9	10.4/ 9.5	631/ 622	2393/1985
307---3	7,000/ 6,900	6,100/ 6,000	11,600/ 9,700	3.4	11.1/11.1	3.1/3.1		2.7/2.9	15.2/14.1	631/ 622	3493/2935
209---3	9,000/ 8,900	7,900/ 7,800	7,800/ 6,400	2.3	10.7/10.7	3.1/3.1		3.7/3.8	10.4/ 9.5	841/ 832	2393/1985
309---3	9,000/ 8,900	7,900/ 7,800	11,600/ 9,700	3.4	10.7/10.7	3.1/3.1		3.7/3.8	15.2/14.1	841/ 832	3493/2935
212---3	12,000/11,900	10,800/10,700	7,800/ 6,400	2.3	10.1/10.1	3.0/3.0		4.7/5.2	10.8/ 9.9	1188/1178	2470/2047
312---3	12,000/11,900	10,800/10,700	11,600/ 9,700	3.4	10.1/10.1	3.0/3.0		4.7/5.2	15.6/14.5	1188/1178	3570/2997
512---3	12,000/11,900	10,800/10,700	17,000/13,600	5.0	10.1/10.1	3.0/3.0		4.7/5.2	22.5/20.0	1188/1178	5170/4147
215---3	14,600/14,300	14,100/13,500	7,800/ 6,400	2.3	9.5/ 9.5	2.9/2.9		6.5/7.1	10.8/9.9	1537/1505	2470/2047
315---3	14,600/14,300	14,100/13,500	11,600/ 9,700	3.4	9.5/ 9.5	2.9/2.9		6.5/7.1	15.6/14.5	1537/1505	3570/2997
515---3	14,600/14,300	14,100/13,500	17,000/13,600	5.0	9.5/ 9.5	2.9/2.9		6.5/7.1	22.5/20.0	1537/1505	5170/4147

MODEL NUMBER 52CQ	POWER FACTOR (%)	FAN MOTOR			MAX FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEP-TACLE TYPE	R-22 CHARGE (oz)	DEHUMIDIFI-CATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. CHASSIS SHIP WT. (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI††							
207---3	100	0.075	0.44	220/260	15	13.0	A	24	1.5	0.78	125
307---3					20	19.0	B				
209---3	99	0.075	0.44	220/260	15	13.0	A	24	2.4	0.73	125
309---3					20	19.0	B				
212---3	99	0.125	0.75	270/350	15	13.3	A	34	3.4	0.71	140
312---3					20	19.3	B				
512---3					30	27.9	C				
215---3	99	0.125	0.75	250/320	15	13.4	A	32	4.6	0.67	150
315---3					20	19.4	B				
515---3					30	28.0	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 380-93.
†Coefficient of Performance (COP) at 47 F outdoor ambient temperature.
**Electric resistance heater power and fan motor power.
††Fan motor indoor CFM (LO/HI) shown for 230-1-60 units.

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	230/208		
OUTLET RATED VOLTS/AMPS	250/15	250/20	250/30
OUTLET BLADE CONFIGURATION	A	B	C
NEMA CONFIGURATION	6-15R	6-20R	6-30R
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20*	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration
NEMA — National Electrical Manufacturers Association

*May be used for 15-amp applications if fused for 15 amps.

PERFORMANCE AND ELECTRICAL DATA

MODEL 52CQ (265-1-60)

MODEL NUMBER 52CQ	CAPACITY* (Btuh)			HEATER kW	EER	COP†	VOLTAGE RANGE	AMPS		WATTS	
	Cooling	Heating						Cooling	Heating**	Cooling	Heating
		Rev. Cycle	Electric								
207---4	7,000	6,100	7,800	2.3	11.1	3.1	239-292	2.4	9.2	631	2396
307---4	7,000	6,100	11,600	3.4	11.1	3.1		2.4	13.3	631	3496
209---4	8,900	7,700	7,800	2.3	10.7	3.1		3.1	9.2	832	2396
309---4	8,900	7,700	11,600	3.4	10.7	3.1		3.1	13.3	832	3496
212---4	12,000	10,800	7,800	2.3	10.1	3.0		4.5	9.4	1188	2470
312---4	12,000	10,800	11,600	3.4	10.1	3.0		4.5	13.5	1188	3570
512---4	12,000	10,800	17,000	5.0	10.1	3.0		4.5	19.6	1188	5170
215---4	14,600	14,100	7,800	2.3	9.5	3.0		5.7	9.4	1537	2470
315---4	14,600	14,100	11,600	3.4	9.5	3.0		5.7	13.5	1537	3570
515---4	14,600	14,100	17,000	5.0	9.5	3.0		5.7	19.6	1537	5170

MODEL NUMBER 52CQ	POWER FACTOR %	FAN MOTOR			MAX. FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEP-TACLE TYPE††	R-22 CHARGE (oz)	DEHUMIDI-FICATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. CHASSIS SHIP WT. (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI							
207---4	97	0.075	0.46	220/260	15	11.3	A	26	1.5	0.78	125
307---4					20	16.5	B				
209---4	97	0.075	0.46	220/260	15	11.3	A	24	2.4	0.73	125
309---4					20	16.5	B				
212---4	99	0.125	0.71	270/340	15	11.6	A	34	3.4	0.71	140
312---4					20	16.7	B				
512---4					25	24.3	C				
215---4	96	0.125	0.71	250/320	15	11.9	A	33	4.6	0.67	150
315---4					20	17.0	B				
515---4					25	24.6	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 380-93.
†Coefficient of Performance (COP) at 47 F outdoor ambient temperature.
**Electric resistance heater power and fan motor power.
††All 265-v units require an electrical subbase (receptacle or hard-wire model).

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	265		
OUTLET RATED VOLTS/AMPS	277/15	277/20	277/30
OUTLET BLADE CONFIGURATION	A	B	C
NEMA CONFIGURATION	7-15R	7-20R	7-30R
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration
NEMA — National Electrical Manufacturers Association

PRODUCT DATA (52C) (cont)

PERFORMANCE AND ELECTRICAL DATA

MODEL 52CE (230/208-1-60)

MODEL NUMBER 52CE	CAPACITY* (Btuh)		HEATER kW	EER	VOLTAGE RANGE (Volts)	AMPS		WATTS	
	Cooling	Heating				Cooling	Heating†	Cooling	Heating
207---3	7,000/ 6,900	7,800/ 6,400	2.3	11.1/11.1	187-253	2.7/2.9	10.4/ 9.5	631/ 622	2393/1985
307---3	7,000/ 6,900	11,600/ 9,700	3.4	11.1/11.1		2.7/2.9	15.2/14.1	631/ 622	3493/2935
209---3	9,000/ 8,900	7,800/ 6,400	2.3	10.7/10.7		3.7/3.8	10.4/ 9.5	841/ 832	2393/1985
309---3	9,000/ 8,900	11,600/ 9,700	3.4	10.7/10.7		3.7/3.8	15.2/14.1	841/ 832	3493/2935
212---3	12,000/11,900	7,800/ 6,400	2.3	10.1/10.1		5.2/5.6	10.8/ 9.9	1188/1178	2470/2047
312---3	12,000/11,900	11,600/ 9,700	3.4	10.1/10.1		5.2/5.6	15.6/14.5	1188/1178	3570/2997
512---3	12,000/11,900	17,000/13,600	5.0	10.1/10.1		5.2/5.6	22.5/20.0	1188/1178	5170/4147
215---3	14,600/14,300	7,800/ 6,400	2.3	9.5/ 9.5		6.4/7.1	10.8/ 9.9	1537/1505	2470/2047
315---3	14,600/14,300	11,600/ 9,700	3.4	9.5/ 9.5		6.4/7.1	15.6/14.5	1537/1505	3570/2997
515---3	14,600/14,300	17,000/13,600	5.0	9.5/ 9.5		6.4/7.1	22.5/20.0	1537/1505	5170/4147

MODEL NUMBER 52CE	POWER FACTOR (%)	FAN MOTOR			MAX. FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEP-TACLE TYPE	R-22 CHARGE (oz)	DEHUMIDIFI-CATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. SHIP WT. (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI**							
207---3	100	0.075	0.44	220/260	15	13.0	A	24	1.5	0.78	125
307---3					20	19.0	B				
209---3	99	0.075	0.44	220/260	15	13.0	A	24	2.4	0.73	125
309---3					20	19.0	B				
212---3	99	0.125	0.75	270/350	15	13.3	A	34	3.4	0.71	140
312---3					20	19.3	B				
512---3					30	27.9	C				
215---3	95	0.125	0.75	250/320	15	13.4	A	32	4.8	0.66	150
315---3					20	19.4	B				
515---3					30	28.0	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 310-93.

†Electric resistance heater power and fan motor power.

**Fan motor indoor CFM (LO/HI) shown for 230-1-60 units.

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	230/208		
OUTLET RATED VOLTS/AMPS	250/15	250/20	250/30
OUTLET BLADE CONFIGURATION	A	B	C
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20*	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration

NEMA — National Electrical Manufacturers Association

*May be used for 15-amp applications if fused for 15 amps.

PERFORMANCE AND ELECTRICAL DATA

MODEL 52CE (265-1-60)

MODEL NUMBER 52CE	CAPACITY* (Btuh)		HEATER kW	EER	VOLTAGE RANGE (Volts)	AMPS		WATTS	
	Cooling	Heating				Cooling	Heating†	Cooling	Heating
207---4	7,000	7,800	2.3	11.1	239-292	2.4	9.2	631	2396
307---4	7,000	11,600	3.4	11.1		2.4	13.3	631	3496
209---4	8,900	7,800	2.3	10.7		3.1	9.2	832	2396
309---4	8,900	11,600	3.4	10.7		3.1	13.3	832	3496
212---4	12,000	7,800	2.3	10.1		4.6	9.4	1188	2470
312---4	12,000	11,600	3.4	10.1		4.6	13.5	1188	3570
512---4	12,000	17,000	5.0	10.1		4.6	19.6	1188	5170
215---4	14,600	7,800	2.3	9.5		5.7	9.4	1537	2470
315---4	14,600	11,600	3.4	9.5		5.7	13.5	1537	3570
515---4	14,600	17,000	5.0	9.5		5.7	19.6	1537	5170

MODEL NUMBER 52CE	POWER FACTOR %	FAN MOTOR			MAX. FUSE SIZE (Amps)	MIN. CIRCUIT AMPS	RECEP-TACLE TYPE**	R-22 CHARGE (oz)	DEHUMIDI-FICATION (Pints/Hr)	SENSIBLE HEAT FACTOR	APPROX. CHASSIS SHIP WT (lb)
		Horsepower	Full Load Amps	Indoor CFM LO/HI							
207---4	97	0.075	0.46	220/260	15	11.3	A	26	1.5	0.78	125
307---4					20	16.5	B				
209---4	97	0.075	0.46	220/260	15	11.3	A	24	2.4	0.73	125
309---4					20	16.5	B				
212---4	99	0.125	0.71	270/340	15	11.6	A	34	3.4	0.71	140
312---4					20	16.7	B				
512---4					25	24.3	C				
215---4	100	0.125	0.71	250/320	15	11.9	A	32	5.0	0.66	150
315---4					20	17.0	B				
515---4					25	24.6	C				

LEGEND

EER — Energy Efficiency Ratio

*Rated in accordance with ARI Standard 310-93.

†Electric resistance heater power and fan motor power.

**All 265-v units require an electrical subbase (receptacle or hard-wire model).

RECEPTACLES AND FUSE TYPES

UNIT NAMEPLATE VOLTAGE	265		
OUTLET RATED VOLTS/AMPS	277/15	277/20	277/30
OUTLET BLADE CONFIGURATION	A	B	C
NEMA CONFIGURATION	7-15R	7-20R	7-30R
TIME DELAY FUSE OR HACR CIRCUIT BREAKER (AMPS)	15	20	30
HEATER (KILOWATTS)	2.3	3.4	5.0

LEGEND

HACR — Heating, Air Conditioning, and Refrigeration

NEMA — National Electrical Manufacturers Association

EXPANDED RATINGS DATA (52P AND 52C)

COOLING PERFORMANCE

ALL 7000 NOMINAL BTUH MODELS

Evaporator entering air temp. — 80 F Evap. air — 260 CFM

TEMP (F) AIR ENT. COND (40% RH)		EVAP AIR — EWB (F)			
		57.00	62.00	67.00	72.00
80	MBtuh	7.05	7.23	8.04	8.85
	kW	0.54	0.54	0.55	0.55
	I	2.35	2.36	2.37	2.39
85	MBtuh	6.93	7.08	7.90	8.71
	kW	0.56	0.57	0.57	0.57
	I	2.45	2.46	2.48	2.49
90	MBtuh	6.85	6.95	7.72	8.54
	kW	0.59	0.59	0.59	0.60
	I	2.56	2.56	2.58	2.59
95	MBtuh	6.76	6.81	7.54	8.35
	kW	0.61	0.61	0.62	0.62
	I	2.67	2.67	2.68	2.89
100	MBtuh	6.70	6.70	7.36	8.17
	kW	0.64	0.64	0.64	0.64
	I	2.79	2.79	2.79	2.80
105	MBtuh	6.57	6.59	7.17	7.98
	kW	0.67	0.67	0.67	0.67
	I	2.91	2.91	2.91	2.92
110	MBtuh	6.42	6.41	6.97	7.79
	kW	0.70	0.70	0.70	0.70
	I	3.03	3.04	3.03	3.03
115	MBtuh	6.28	6.27	6.76	7.59
	kW	0.73	0.73	0.72	0.73
	I	3.17	3.17	3.17	3.16

LEGEND

EWB — Entering Wet Bulb
I — Compressor Current Amps
kW — Total Power
MBtuh — Total Cooling Capacity
RH — Relative Humidity

NOTES:
1. Total current (I) based on 230-volt system.
2. Evaporator entering dry bulb air temperature is 80° F.

ALL 9000 NOMINAL BTUH MODELS

Evaporator entering air temp. — 80 F Evap. air — 260 CFM

TEMP (F) AIR ENT. COND (40% RH)		EVAP AIR — EWB (F)			
		57.00	62.00	67.00	72.00
80	MBtuh	8.58	8.91	9.71	10.46
	kW	0.71	0.72	0.71	0.71
	I	3.14	3.14	3.13	3.12
85	MBtuh	8.44	8.72	9.56	10.48
	kW	0.75	0.75	0.74	0.74
	I	3.28	3.28	3.27	3.27
90	MBtuh	8.29	8.52	9.47	10.39
	kW	0.78	0.78	0.78	0.78
	I	3.44	3.44	3.42	3.41
95	MBtuh	8.12	8.30	9.29	10.26
	kW	0.82	0.82	0.81	0.81
	I	3.59	3.60	3.58	3.56
100	MBtuh	7.94	8.07	9.06	10.07
	kW	0.85	0.85	0.85	0.85
	I	3.74	3.74	3.74	3.72
105	MBtuh	7.75	7.84	8.83	9.80
	kW	0.89	0.89	0.89	0.88
	I	3.89	3.90	3.92	3.89
110	MBtuh	7.57	7.60	8.59	9.67
	kW	0.92	0.93	0.93	0.92
	I	4.06	4.07	4.10	4.06
115	MBtuh	7.38	7.38	8.32	9.41
	kW	0.96	0.97	0.97	0.97
	I	4.24	4.24	4.27	4.24

LEGEND

EWB — Entering Wet Bulb
I — Compressor Current Amps
kW — Total Power
MBtuh — Total Cooling Capacity
RH — Relative Humidity

NOTES:
1. Total current (I) based on 230-volt system.
2. Evaporator entering dry bulb air temperature is 80° F.

52CQ 12,000 NOMINAL BTUH MODELS

Evaporator entering air temp. — 80 F Evap. air — 350 CFM

TEMP (F) AIR ENT. COND (40% RH)		EVAP AIR — EWB (F)			
		57.00	62.00	67.00	72.00
80	MBtuh	12.44	12.74	13.61	13.84
	kW	1.06	1.06	1.05	1.02
	I	4.65	4.65	4.59	4.48
85	MBtuh	12.29	12.51	13.52	13.90
	kW	1.10	1.10	1.09	1.07
	I	4.85	4.84	4.80	4.69
90	MBtuh	12.10	12.29	13.20	13.84
	kW	1.15	1.15	1.13	1.11
	I	5.05	5.05	4.98	4.91
95	MBtuh	11.89	12.01	12.97	13.70
	kW	1.20	1.20	1.18	1.17
	I	5.26	5.26	5.18	5.12
100	MBtuh	11.66	11.73	12.72	13.34
	kW	1.25	1.25	1.23	1.21
	I	5.48	5.48	5.40	5.31
105	MBtuh	11.43	11.48	12.40	13.12
	kW	1.30	1.30	1.28	1.26
	I	5.70	5.70	5.62	5.52
110	MBtuh	11.19	11.23	12.20	12.98
	kW	1.35	1.35	1.33	1.31
	I	5.94	5.94	5.86	5.76
115	MBtuh	10.94	10.98	11.91	12.73
	kW	1.41	1.41	1.39	1.37
	I	6.18	6.18	6.10	6.00

LEGEND

EWB — Entering Wet Bulb
I — Compressor Current Amps
kW — Total Power
MBtuh — Total Cooling Capacity
RH — Relative Humidity

NOTES:
1. Total current (I) based on 230-volt system.
2. Evaporator entering dry bulb air temperature is 80° F.

52PC,PE,CE 12,000 NOMINAL BTUH MODELS

Evaporator entering air temp. — 80 F Evap. air — 350 CFM

TEMP (F) AIR ENT. COND (40% RH)		EVAP AIR — EWB (F)			
		57.00	62.00	67.00	72.00
80	MBtuh	12.17	12.50	12.83	13.23
	kW	1.07	1.07	1.05	1.03
	I	4.73	4.74	4.65	4.57
85	MBtuh	11.95	12.35	12.72	13.19
	kW	1.11	1.11	1.10	1.08
	I	4.93	4.95	4.86	4.79
90	MBtuh	11.74	12.10	12.62	13.06
	kW	1.16	1.16	1.15	1.13
	I	5.14	5.16	5.08	5.00
95	MBtuh	11.54	11.90	12.50	12.95
	kW	1.21	1.21	1.20	1.17
	I	5.36	5.38	5.31	5.21
100	MBtuh	11.37	11.68	12.35	12.80
	kW	1.26	1.26	1.25	1.23
	I	5.58	5.60	5.54	5.45
105	MBtuh	11.19	11.47	12.17	12.63
	kW	1.31	1.31	1.30	1.28
	I	5.81	5.83	5.78	5.68
110	MBtuh	11.04	11.28	11.93	12.44
	kW	1.37	1.37	1.35	1.33
	I	6.06	6.07	6.01	5.92
115	MBtuh	10.86	11.02	11.59	12.19
	kW	1.42	1.42	1.41	1.39
	I	6.31	6.31	6.25	6.17

LEGEND

EWB — Entering Wet Bulb
I — Compressor Current Amps
kW — Total Power
MBtuh — Total Cooling Capacity
RH — Relative Humidity

NOTES:
1. Total current (I) based on 230-volt system.
2. Evaporator entering dry bulb air temperature is 80° F.

COOLING PERFORMANCE (cont)

52PQ 12,000 NOMINAL BTUH MODELS

Evaporator entering air temp. — 80 F Evap. air — 350 CFM

TEMP (F) AIR ENT. COND (40% RH)		EVAP AIR — EWB (F)			
		57.00	62.00	67.00	72.00
80	MBtuh	11.79	11.95	12.65	13.17
	kW	0.97	0.97	0.95	0.93
	I	4.29	4.27	4.17	4.08
85	MBtuh	11.60	11.74	12.48	12.97
	kW	1.02	1.02	1.00	0.97
	I	4.49	4.48	4.38	4.27
90	MBtuh	11.39	11.49	12.28	12.79
	kW	1.07	1.07	1.04	1.02
	I	4.69	4.68	4.59	4.48
95	MBtuh	11.17	11.24	12.05	12.58
	kW	1.12	1.12	1.09	1.07
	I	4.90	4.90	4.80	4.69
100	MBtuh	11.66	10.97	11.78	12.33
	kW	1.17	1.17	1.14	1.12
	I	5.12	5.12	5.02	4.91
105	MBtuh	12.16	10.70	11.50	12.04
	kW	1.22	1.22	1.20	1.17
	I	5.34	5.34	5.25	5.13
110	MBtuh	12.69	10.45	11.17	11.75
	kW	1.27	1.27	1.25	1.22
	I	5.57	5.57	5.48	5.36
115	MBtuh	13.23	10.19	10.83	11.39
	kW	1.32	1.32	1.30	1.27
	I	5.81	5.81	5.72	5.59

LEGEND

EWB — Entering Wet Bulb
I — Compressor Current Amps
kW — Total Power
MBtuh — Total Cooling Capacity
RH — Relative Humidity

NOTES:
1. Total current (I) based on 230-volt system.
2. Evaporator entering dry bulb air temperature is 80°F.

ALL 15,000 NOMINAL BTUH MODELS

Evaporator entering air temp. — 80 F Evap. air — 320 CFM

TEMP (F) AIR ENT. COND (40% RH)		EVAP AIR — EWB (F)			
		57.00	62.00	67.00	72.00
80	MBtuh	—	14.77	15.82	16.74
	kW	—	1.39	1.36	1.33
	I	—	6.09	6.00	5.85
85	MBtuh	—	14.55	15.63	16.59
	kW	—	1.45	1.43	1.40
	I	—	6.38	6.27	6.14
90	MBtuh	—	14.20	15.39	16.39
	kW	—	1.53	1.49	1.46
	I	—	6.72	6.56	6.43
95	MBtuh	12.98	13.85	15.08	16.15
	kW	1.67	1.61	1.56	1.53
	I	7.32	7.05	6.85	6.73
100	MBtuh	12.78	13.51	14.79	15.85
	kW	1.74	1.68	1.63	1.60
	I	7.63	7.37	7.16	7.03
105	MBtuh	12.51	13.03	14.39	15.48
	kW	1.81	1.75	1.70	1.67
	I	7.95	7.68	7.48	7.35
110	MBtuh	12.24	12.54	13.91	15.04
	kW	1.88	1.82	1.78	1.75
	I	8.27	8.00	7.80	7.67
115	MBtuh	11.95	12.05	13.54	14.53
	kW	1.96	1.89	1.85	1.82
	I	8.62	8.32	8.14	8.00

LEGEND

EWB — Entering Wet Bulb
I — Compressor Current Amps
kW — Total Power
MBtuh — Total Cooling Capacity
RH — Relative Humidity

NOTES:
1. Total current (I) based on 230-volt system.
2. Evaporator entering dry bulb air temperature is 80° F.

COOLING SENSIBLE HEAT FACTORS (SHF) AT 80 F INDOOR DB

MODEL 52PC,PE,PQ,CE,CQ	INDOOR WB (F)	OUTDOOR AMBIENT DB TEMPERATURE (F)							
		80	85	90	95	100	105	110	115
All 7,000 Nominal Btuh Models	57	0.91	0.91	0.91	0.91	0.91	0.90	0.90	0.90
	62	0.89	0.90	0.91	0.91	0.92	0.92	0.91	0.91
	67	0.71	0.72	0.72	0.74	0.74	0.75	0.76	0.77
	72	0.53	0.53	0.54	0.54	0.54	0.55	0.55	0.56
All 9,000 Nominal Btuh Models	57	0.93	0.93	0.93	0.93	0.92	0.92	0.92	0.92
	62	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.92
	67	0.67	0.67	0.68	0.70	0.70	0.70	0.71	0.72
	72	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.53
52CQ 12,000 Nominal Btuh Models	57	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
	52	0.88	0.89	0.91	0.92	0.93	0.93	0.93	0.93
	67	0.69	0.69	0.70	0.70	0.71	0.72	0.73	0.74
	72	0.50	0.51	0.52	0.52	0.53	0.53	0.54	0.54
52CE,PC,PE 12,000 Nominal Btuh Models	57	0.92	0.91	0.90	0.90	0.90	0.90	0.90	0.90
	62	0.89	0.89	0.90	0.90	0.91	0.92	0.92	0.92
	67	0.68	0.69	0.70	0.72	0.72	0.73	0.74	0.75
	72	0.51	0.51	0.51	0.51	0.52	0.53	0.53	0.54
52PQ 12,000 Nominal Btuh Models	57	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
	62	0.89	0.90	0.91	0.92	0.93	0.93	0.93	0.93
	67	0.69	0.70	0.71	0.71	0.72	0.73	0.74	0.75
	72	0.51	0.51	0.52	0.52	0.53	0.53	0.53	0.54
All 15,000 Nominal Btuh Models	57	—	—	—	0.91	0.91	0.91	0.91	0.90
	62	0.86	0.86	0.86	0.87	0.88	0.89	0.90	0.91
	67	0.67	0.67	0.68	0.68	0.69	0.70	0.71	0.71
	72	0.50	0.50	0.51	0.51	0.51	0.52	0.52	0.53

LEGEND

DB — Dry Bulb
WB — Wet Bulb

SOUND DATA (52P AND 52C)

INDOOR SOUND DATA (52P AND 52C)

The tables below indicate the approximate indoor and outdoor sound levels. Tests were conducted in the Carrier Sound Testing Laboratory according to ARI (Air Conditioning and Refrigeration Institute) Noise Rating Standard 300 for non-ducted indoor air-conditioning equipment.

INDOOR SOUND ESTIMATING TABLE

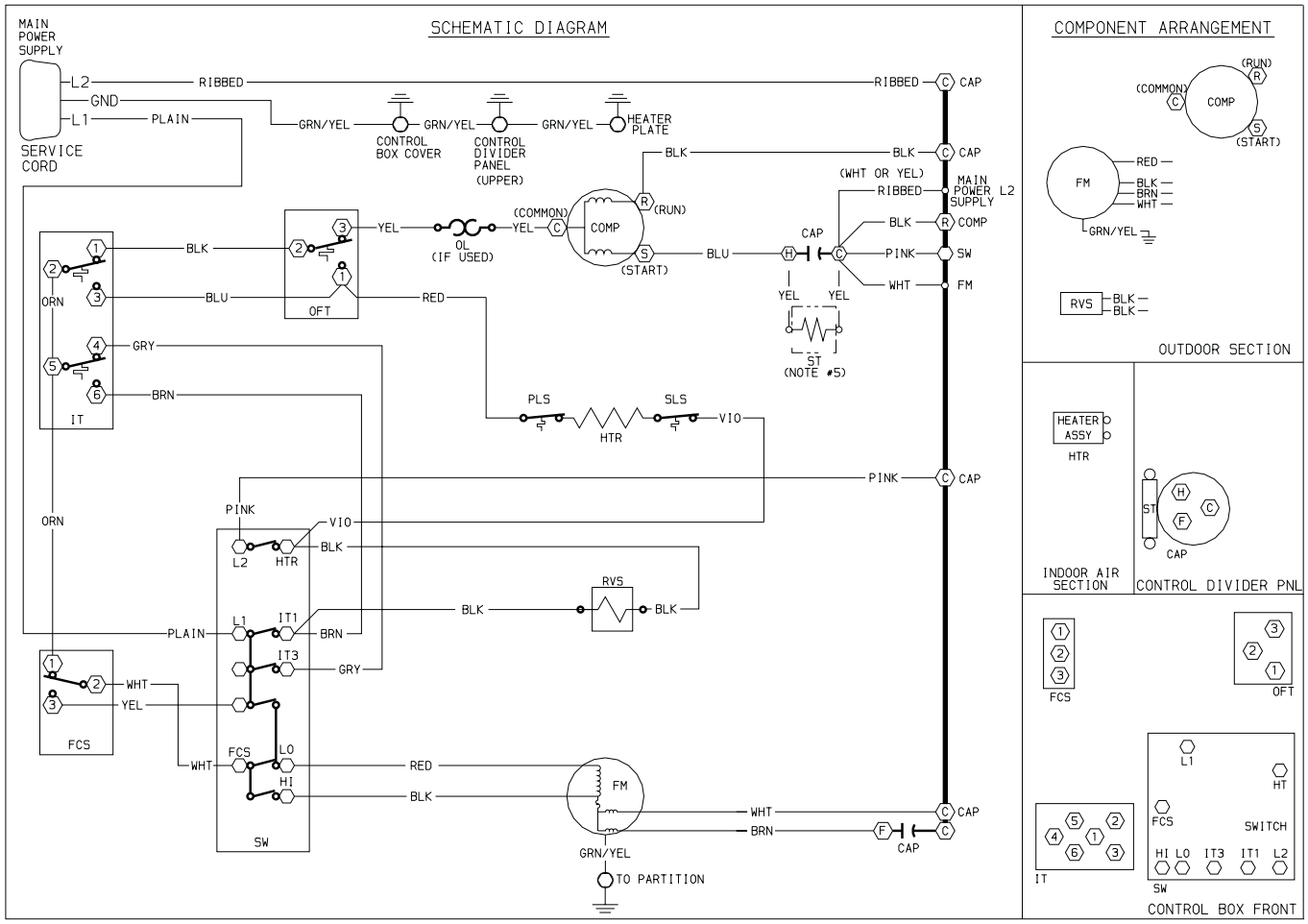
OPERATING MODE	VOLTS	INDOOR SOUND ESTIMATING TABLE (dBA)								INDOOR SOUND ESTIMATING TABLE (BELS)							
		Nominal Sizes (Btuh)								Nominal Sizes (Btuh)							
		52PQ and 52CQ				52PC, PE and 52CE				52PQ and 52CQ				52PC, PE and 52CE			
		7000	9000	12000	15000	7000	9000	12000	15000	7000	9000	12000	15000	7000	9000	12000	15000
LOW COOL	208	53.3	53.9	57.6	59.3	53.3	53.9	57.4	59.3	5.3	5.4	5.8	5.9	5.3	5.4	5.7	5.9
	230	56.3	57.2	60.3	59.3	56.3	57.2	60.4	59.3	5.6	5.7	6.0	5.9	5.6	5.7	6.0	5.9
	265	56.2	56.2	59.8	59.3	56.2	56.2	60.4	59.3	5.6	5.6	6.0	5.9	5.6	5.6	6.0	5.9
HIGH COOL	208	58.6	60.1	64.1	63.7	58.6	60.1	63.1	63.7	5.9	6.0	6.4	6.4	5.9	6.0	6.3	6.4
	230	59.6	60.8	65.9	63.7	59.6	60.8	64.8	63.7	6.0	6.1	6.6	6.4	6.0	6.1	6.5	6.4
	265	60.1	60.1	64.9	63.7	60.1	60.1	64.8	63.7	6.0	6.0	6.5	6.4	6.0	6.0	6.5	6.4
FAN	208	57.7	59.5	63.9	63.7	57.7	59.5	64.1	63.7	5.8	6.0	6.4	6.4	5.8	6.0	6.4	6.4
	230	58.5	60.3	65.8	63.7	58.5	60.3	64.6	63.7	5.9	6.0	6.6	6.4	5.9	6.0	6.5	6.4
	265	59.1	59.1	64.3	63.7	59.1	59.1	64.6	63.7	5.9	5.9	6.4	6.4	5.9	5.9	6.5	6.4
LOW HEAT	208	53.8	53.8	57.6	59.5	52.0	52.8	57.5	58.8	5.4	5.4	5.8	6.0	5.2	5.3	5.8	5.9
	230	56.2	56.5	60.2	59.5	55.5	55.5	59.6	58.8	5.6	5.7	6.0	6.0	5.6	5.6	6.0	5.9
	265	56.0	56.0	60.0	59.5	55.0	55.0	59.6	58.8	5.6	5.6	6.0	6.0	5.5	5.5	6.0	5.9
HIGH HEAT	208	58.5	59.2	64.1	65.0	57.7	59.5	64.1	63.7	5.9	5.9	6.4	6.5	5.8	6.0	6.4	6.4
	230	59.4	59.7	65.4	65.0	58.5	60.3	64.6	63.7	5.9	6.0	6.5	6.5	5.9	6.0	6.5	6.4
	265	59.3	59.3	64.4	65.0	59.1	59.1	64.6	63.7	5.9	5.9	6.5	6.5	5.9	5.9	6.5	6.4

OUTDOOR SOUND ESTIMATING TABLE

OPERATING MODE	VOLTS	OUTDOOR SOUND ESTIMATING TABLE (dBA)								OUTDOOR SOUND ESTIMATING TABLE (BELS)							
		Nominal Sizes (Btuh)								Nominal Sizes (Btuh)							
		52PQ and 52CQ				52PC, PE and 52CE				52PQ and 52CQ				52PC, PE and 52CE			
		7000	9000	12000	15000	7000	9000	12000	15000	7000	9000	12000	15000	7000	9000	12000	15000
LOW COOL	208	57.3	58.7	59.8	61.1	57.3	58.7	59.2	61.1	5.7	5.9	6.0	6.1	5.7	5.9	5.9	6.1
	230	59.4	59.7	60.8	61.1	59.4	59.7	61.4	61.1	5.9	6.0	6.1	6.1	5.9	6.0	6.1	6.1
	265	58.5	58.5	60.9	61.1	58.5	58.5	61.4	61.1	5.9	5.9	6.1	6.1	5.9	5.9	6.1	6.1
HIGH COOL	208	59.3	61.1	62.7	64.4	59.3	61.1	63.2	64.4	5.9	6.1	6.3	6.4	5.9	6.1	6.3	6.4
	230	60.1	60.8	63.9	64.4	60.1	60.8	64.6	64.4	6.0	6.1	6.4	6.4	6.0	6.1	6.5	6.4
	265	61.0	61.0	63.5	64.4	61.0	61.0	64.6	64.4	6.1	6.1	6.4	6.4	6.1	6.1	6.5	6.4
FAN	208	57.4	57.3	61.8	64.0	57.4	57.3	63.3	64.0	5.7	5.7	6.2	6.4	6.4	5.7	6.3	6.4
	230	58.4	58.2	63.4	64.0	58.4	58.2	64.9	64.0	5.8	5.8	6.3	6.4	5.8	5.8	6.5	6.4
	265	59.3	59.3	63.2	64.0	59.3	59.3	64.9	64.0	5.9	5.9	6.3	6.4	5.9	5.9	6.5	6.4
LOW HEAT	208	57.3	58.9	60.3	63.9	52.2	55.5	58.0	58.7	5.7	5.9	6.0	6.4	5.2	5.6	5.8	5.9
	230	59.0	61.2	62.2	63.9	55.0	57.8	60.3	58.7	5.9	6.1	6.2	6.4	5.5	5.8	6.0	5.9
	265	61.2	61.2	61.9	63.9	55.2	55.2	60.3	58.7	6.1	6.1	6.2	6.4	5.5	5.5	6.0	5.9
HIGH HEAT	208	60.1	61.4	63.6	66.5	57.4	57.3	63.3	64.0	6.0	6.1	6.4	6.7	5.7	5.7	6.3	6.4
	230	60.5	62.5	65.4	66.5	58.4	58.2	64.9	64.0	6.1	6.3	6.5	6.7	5.8	5.8	6.5	6.4
	265	62.2	62.2	64.7	66.5	59.3	59.3	64.9	64.0	6.2	6.2	6.5	6.7	5.9	5.9	6.5	6.4

SOUND TRANSMISSION CLASS (STC) = 25

WIRING DIAGRAMS (52P AND 52C)



COMPONENT LEGEND

- Component Connection (Marked)
- Component Connection (Unmarked)
- Accessory or Optional Wiring To Indicate Common Potential Only Not To Represent Wire

CAP	—	Capacitor
COMP	—	Compressor
FM	—	Fan Motor
FCS	—	Fan Cycle Switch
HTR	—	Heater
IT	—	Indoor Thermostat
OFT	—	Outdoor Frost Thermostat
OL	—	Overload
PLS	—	Primary Limit Switch
RVS	—	Reversing Valve Solenoid
SLS	—	Secondary Limit Switch
ST	—	Start Thermistor
SW	—	Switch

NOTES:

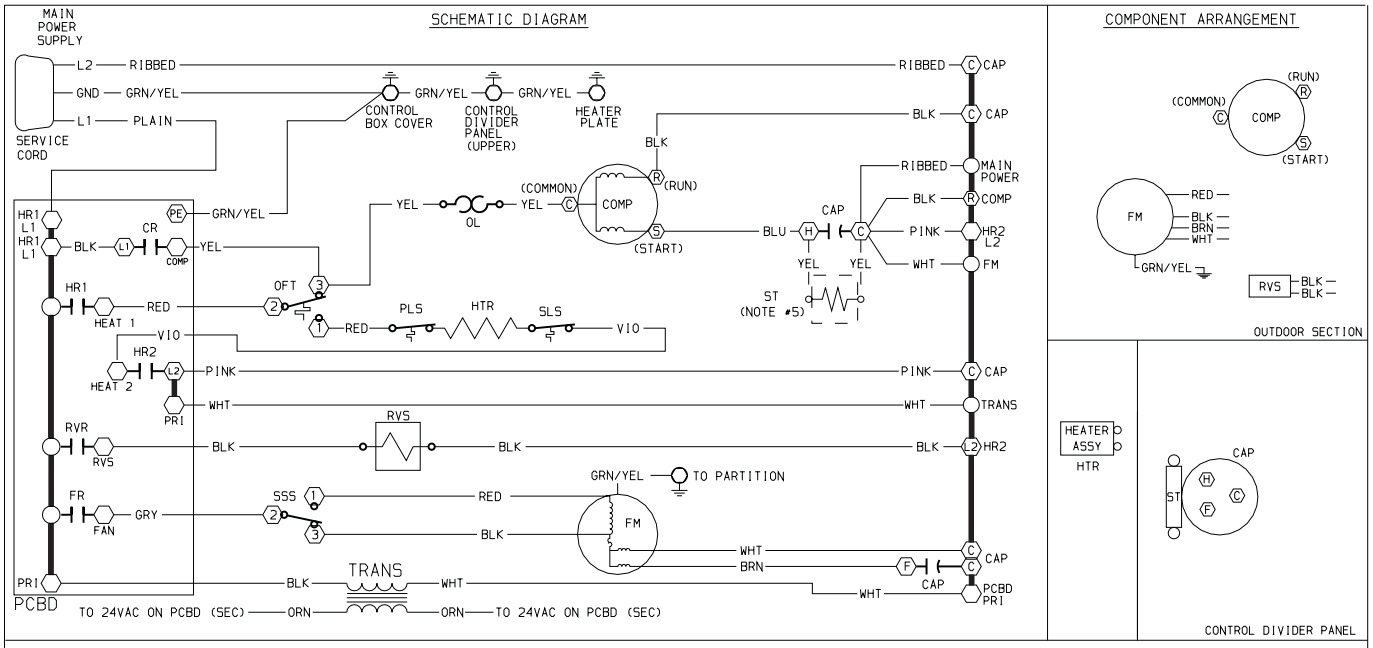
1. Recommended for use on grounded power supply only.
2. Compressor and fan motor thermally protected.
3. Use copper conductors only.
4. All wiring must conform with N.E.C. and local codes.
5. Dashed lines indicate components when used.
6. OFT determines whether to bring on compressor heat or electric heat.

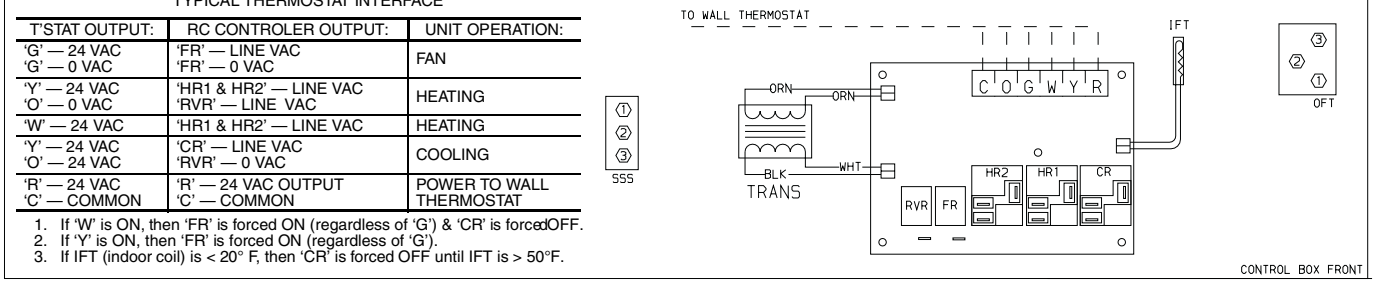
POSITION	CONTACTS MADE
SELECTOR SWITCH	
OFF	NONE
FAN	L1 TO LO
LO HEAT	L1 TO IT1, FCS TO LO, L2 TO HTR
HI HEAT	L1 TO IT1, FCS TO HI, L2 TO HTR
LO COOL	L1 TO IT3, FCS TO LO
HI COOL	L1 TO IT3, FCS TO HI

FAN CYCLE SWITCH	
CYCLE	1 TO 2
CONSTANT	3 TO 2

52PQ and 52CQ — Typical Wiring Schematic for Standard Heat Pump Units

WIRING DIAGRAMS (52P AND 52C) (cont)




TYPICAL THERMOSTAT INTERFACE
T'STAT OUTPUT: | RC CONTROLER OUTPUT: | UNIT OPERATION:
'G' — 24 VAC / 'G' — 0 VAC | 'FR' — LINE VAC / 'FR' — 0 VAC | FAN
'Y' — 24 VAC / 'O' — 0 VAC | 'HR1 & HR2' — LINE VAC / 'RVR' — LINE VAC | HEATING
'W' — 24 VAC | 'HR1 & HR2' — LINE VAC | HEATING
'Y' — 24 VAC / 'O' — 24 VAC | 'CR' — LINE VAC / 'RVR' — 0 VAC | COOLING
'R' — 24 VAC / 'C' — COMMON | 'R' — 24 VAC OUTPUT / 'C' — COMMON | POWER TO WALL THERMOSTAT
1. If 'W' is ON, then 'FR' is forced ON (regardless of 'G') & 'CR' is forced OFF.
2. If 'Y' is ON, then 'FR' is forced ON (regardless of 'G').
3. If IFT (indoor coil) is < 20° F, then 'CR' is forced OFF until IFT is > 50°F.
SSS
TO WALL THERMOSTAT
C O G W Y R
IFT
OFT
ORN
WHT
BLK
TRANS
HR2
HR1
CR
RVR
FR
CONTROL BOX FRONT

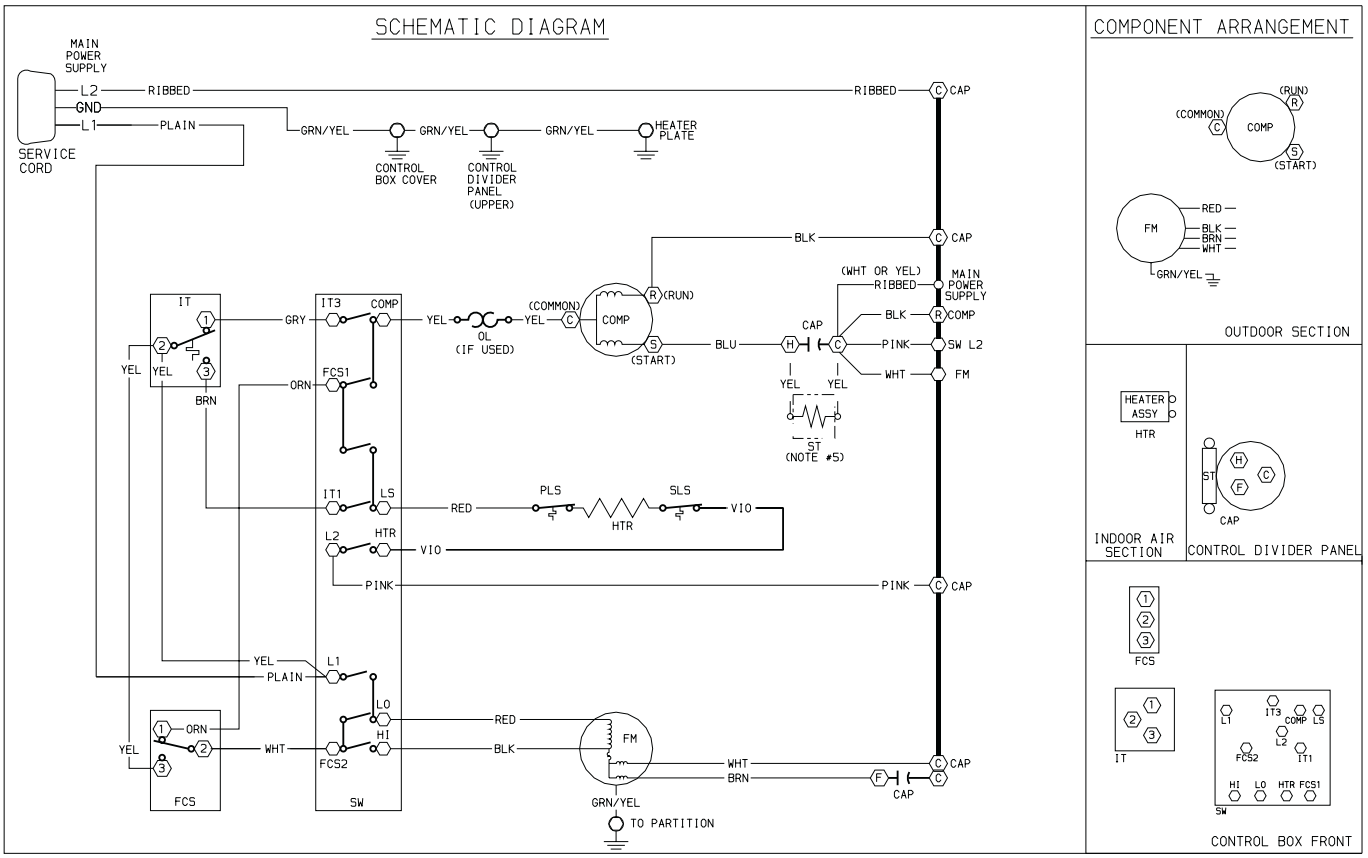
COMPONENT LEGEND

- Component Connection (Marked)
- Component Connection (Unmarked)
- Terminal Board Connection
- Field Splice
- Field Control Wiring
- Accessory or Optional Wiring
- To Indicate Common Potential Only Not To Represent Wire

CAP — Capacitor
COMP — Compressor
FM — Fan Motor
HTR — Heater
IFT — Indoor Frost Thermostat
OFT — Outdoor Frost Thermostat
OL — Overload
PLS — Primary Limit Switch
RVS — Reversing Valve Solenoid
SLS — Secondary Limit Switch
SSS — Speed Selector Switch
ST — Start Thermistor
TRANS — Transformer
PCBD — Printed Circuit Board
— HR1 — Heater Relay
— HR2 — Heater Relay
— CR — Compressor Relay
— FR — Fan Relay
— RVR — Reversing Valve Relay

NOTES:
1. Recommended for use on grounded power supply only.
2. Compressor and fan motor thermally protected.
3. Use copper conductors only.
4. All wiring must conform with N.E.C. and local codes.
5. Dashed lines indicate components when used.
6. Field control wire suitable for N.E.C. class 2 control circuit, at 24 volts.
7. OFT determines whether to bring on compressor heat or electric heat.

52PQ and 52CQ — Typical Wiring Schematic for Wall Thermostat Control Heat Pump Units



COMPONENT LEGEND

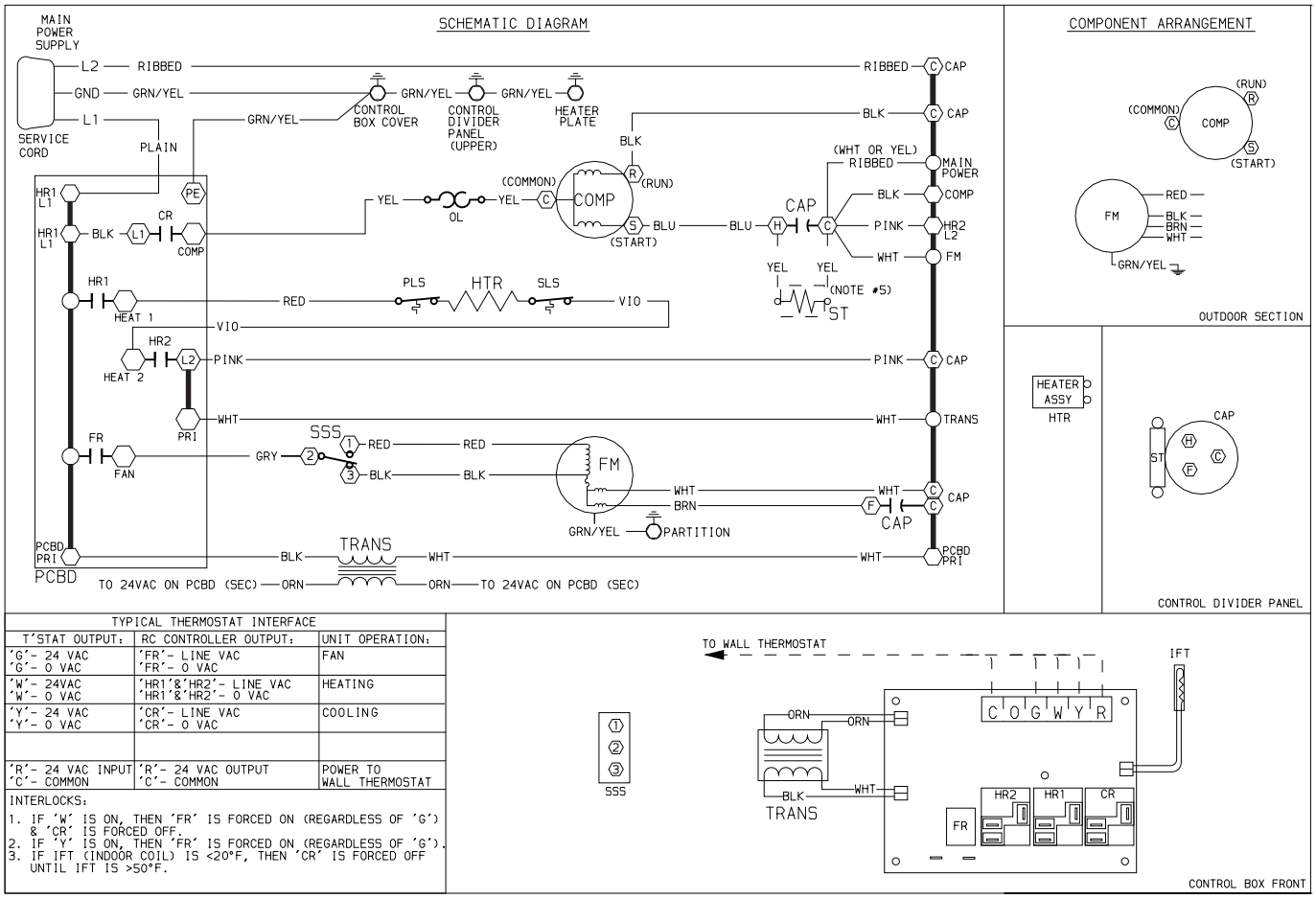
⬡	COMPONENT CONNECTION (MARKED)
○	COMPONENT CONNECTION (UNMARKED)
- - - -	ACCESSORY OR OPTIONAL WIRING
▬	TO INDICATE COMMON POTENIAL ONLY NOT TO REPRESENT WIRE
CAP	CAPACITOR
COMP	COMPRESSOR
FM	FAN MOTOR
FCS	FAN CYCLE SWITCH
HTR	HEATER
IT	INDOOR THERMOSTAT
OL	OVERLOAD
PLS	PRIMARY LIMIT SWITCH
SLS	SECONDARY LIMIT SWITCH
ST	START THERMISTOR
SW	SWITCH

NOTES:
1. RECOMMENDED FOR USE ON GROUNDED POWER SUPPLY ONLY.
2. COMPRESSOR AND FAN MOTOR THERMALLY PROTECTED.
3. USE COPPER CONDUCTORS ONLY.
4. ALL WIRING MUST CONFORM WITH N.E.C. AND LOCAL CODES.
5. DASHED LINES INDICATE COMPONENTS WHEN USED.

POSITION	CONTACTS MADE
SELECTOR SWITCH	
OFF	NONE
FAN	L1 TO HI, FCS1 TO LS
LO HEAT	FCS2 TO LO, IT1 TO LS, L2 TO HTR, FCS1 TO LS
HI HEAT	FCS2 TO HI, IT1 TO LS, L2 TO HTR, FCS1 TO LS
LO COOL	FCS2 TO LO,COMP TO FCS1,COMP TO IT3
HI COOL	FCS2 TO HI,COMP TO FCS1,COMP TO IT3
FAN CYCLE SWITCH	
CYCLE	1 TO 2
CONTINUOUS	3 TO 2

52PE and 52CE — Typical Wiring Schematic for Standard Heat/Cool Units

WIRING DIAGRAMS (52P AND 52C) (cont)



TYPICAL THERMOSTAT INTERFACE		
T'STAT OUTPUT:	RC CONTROLLER OUTPUT:	UNIT OPERATION:
'G'- 24 VAC 'G'- 0 VAC	'FR'- LINE VAC 'FR'- 0 VAC	FAN
'W'- 24VAC 'W'- 0 VAC	'HR1'&'HR2'- LINE VAC 'HR1'&'HR2'- 0 VAC	HEATING
'Y'- 24 VAC 'Y'- 0 VAC	'CR'- LINE VAC 'CR'- 0 VAC	COOLING
'R'- 24 VAC INPUT 'C'- COMMON	'R'- 24 VAC OUTPUT 'C'- COMMON	POWER TO WALL THERMOSTAT

INTERLOCKS:

1. IF 'W' IS ON, THEN 'FR' IS FORCED ON (REGARDLESS OF 'G') & 'CR' IS FORCED OFF.
2. IF 'Y' IS ON, THEN 'FR' IS FORCED ON (REGARDLESS OF 'G').
3. IF IFT (INDOOR COIL) IS <20°F, THEN 'CR' IS FORCED OFF UNTIL IFT IS >50°F.

COMPONENT LEGEND

- COMPONENT CONNECTION (MARKED)
- COMPONENT CONNECTION (UNMARKED)
- TERMINAL BOARD CONNECTION
- FIELD SPLICE
- FIELD CONTROL WIRING
- ACCESSORY OR OPTIONAL WIRING
- TO INDICATE COMMON POTENTIAL ONLY NOT TO REPRESENT WIRE

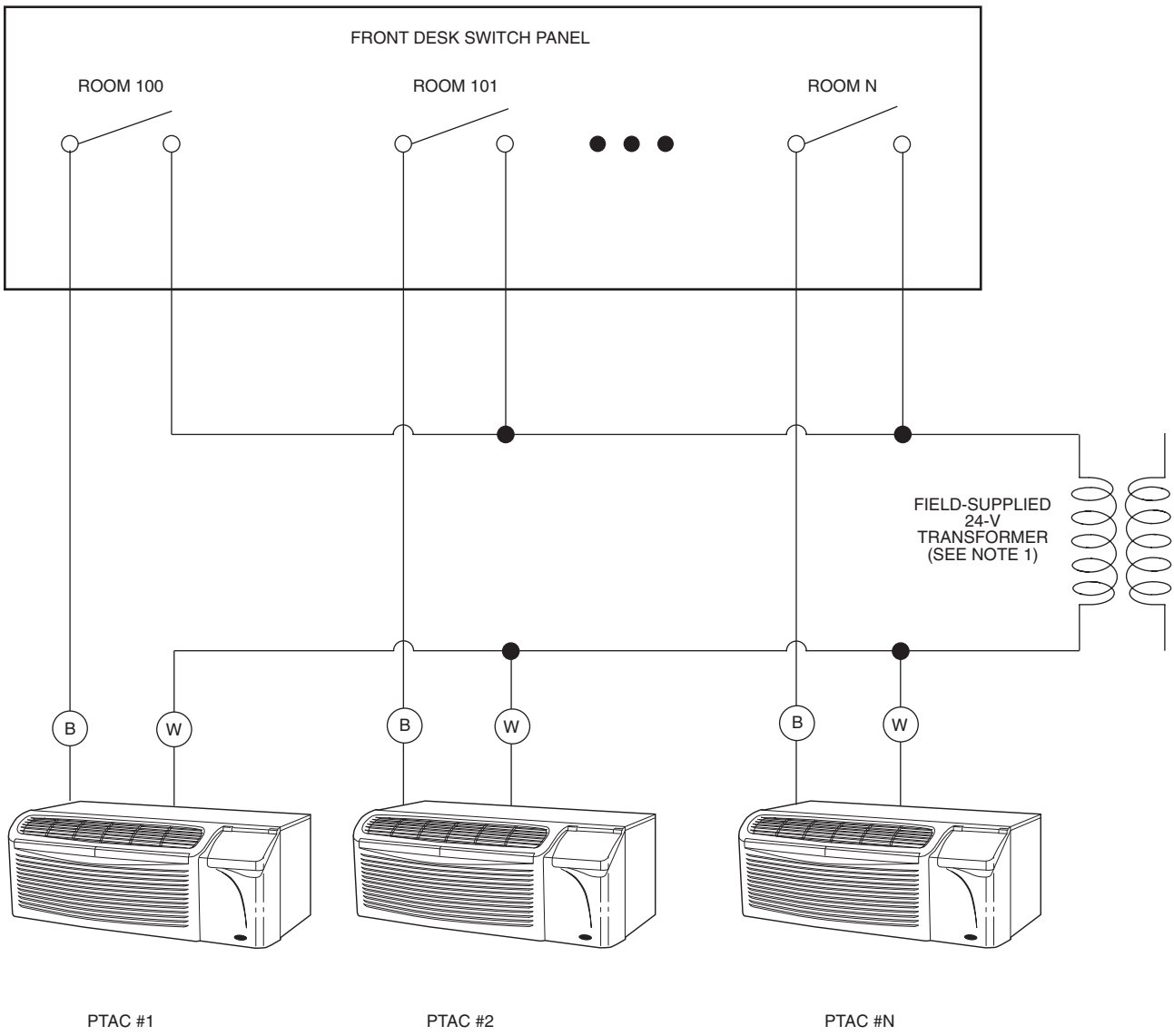
CAP	CAPACITOR
COMP	COMPRESSOR
FM	FAN MOTOR
HTR	HEATER
IFT	INDOOR FROST THERMISTOR
OL	OVERLOAD
PLS	PRIMARY LIMIT SWITCH
SLS	SECONDARY LIMIT SWITCH
SSS	SPEED SELECTOR SWITCH
ST	START THERMISTOR

TRANS	TRANSFORMER
PCBD	PRINTED CIRCUIT BOARD
- HR1	HEATER RELAY
- HR2	HEATER RELAY
- CR	COMPRESSOR RELAY
- FR	FAN RELAY

NOTES:

1. RECOMMENDED FOR USE ON GROUNDED POWER SUPPLY ONLY.
2. COMPRESSOR AND FAN MOTOR THERMALLY PROTECTED.
3. USE COPPER CONDUCTORS ONLY.
4. ALL WIRING MUST CONFORM WITH N.E.C. AND LOCAL CODES.
5. DASHED LINES INDICATE COMPONENT WHEN USED.
6. FIELD CONTROL WIRE SUITABLE FOR N.E.C. CLASS 2 CONTROL CIRCUIT, AT 24 VOLTS.

52PE and 52CE — Typical Wiring Schematic for Wall Thermostat Control Heat/Cool Units



LEGEND

AWG — American Wire Gage
B — Black
PTAC — Packaged Terminal Air Conditioner
W — White

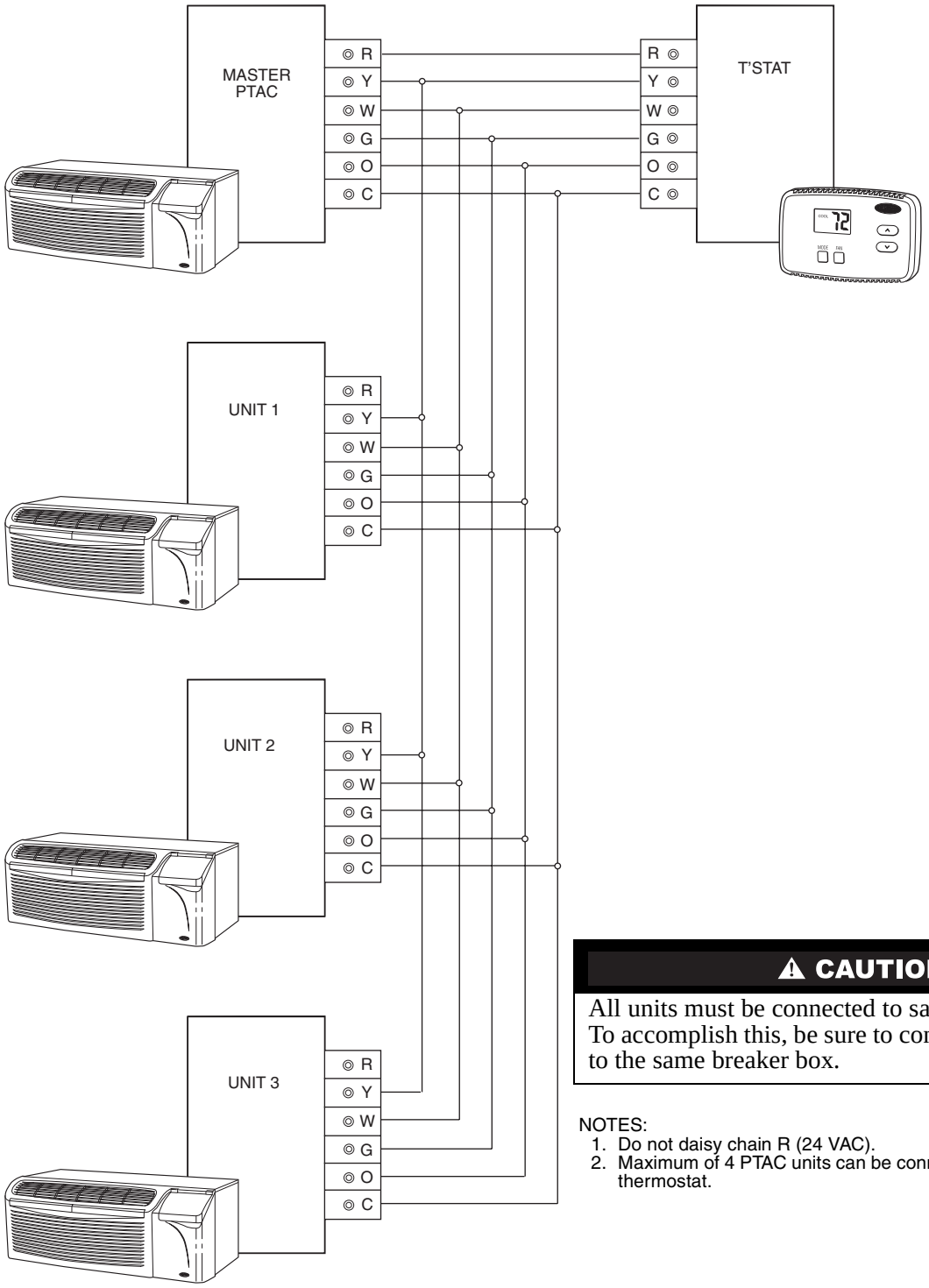
NOTES:

1. To size transformer, use the following equation:
   Quantity of PTAC units x 12 va = Transformer Size (va)
   Example: 110 PTAC Units x 12 va = 1320 vaTransformer
2. Following are recommended wire sizes:

AWG WIRE SIZE NO.	MAXIMUM LENGTH (ft)
24	400
22	600
20	900
18	1500
16	2000

Typical Wiring Schematic for Energy Management Kit

WIRING DIAGRAMS (52P AND 52C) (cont)



⚠ CAUTION

All units must be connected to same ground source. To accomplish this, be sure to connect all units back to the same breaker box.

NOTES:
1. Do not daisy chain R (24 VAC).
2. Maximum of 4 PTAC units can be connected to one single wall thermostat.

Typical Wiring for Multiple PTAC Units Connected to a Single Wall Thermostat

PACKAGED TERMINAL COOLING UNIT WITH HEAT PUMP OR ELECTRIC HEATING

HVAC Guide Specifications

Size Range: Cooling: 6,900 to 15,100 Btuh
Heating: 6,000 to 14,100 Btuh Heat Pump
6,400 to 17,000 Btuh Electric

Carrier Model Numbers:

52PC Premier Series, Cooling Only

52PE Premier Series, Cooling with Electric Heat

52PQ Premier Series, Heat Pump with Electric Heat

52CE Comfort Series, Cooling with Electric Heat

52CQ Comfort Series, Heat Pump with Electric Heat

Part 1 — General

1.01 SYSTEM DESCRIPTION

Single piece, thru-the-wall electrically controlled unit using hermetic rotary compressor for cooling and heat pump or electric resistance heat, as shown on the contract drawings.

A. Insulated Polymer Wall Sleeve:

Wall sleeve shall provide excellent thermal insulation, be textured to hide scratches and prevent shine, will have superior outdoor noise absorption and shall be corrosion free for the life of the product. The Wall Sleeve must have dimensions of 42 in. width x 16 in. height x $14^{7}/_{8}$ in. depth and be shipped with a rear weather barrier installed.

B. Wall Sleeve Molding:

Molding shall trim the wall sleeve to the existing wall, to hide wall imperfections and irregularities in the wall opening.

C. Outdoor Polymer Louvered Grille:

Outdoor grille shall resist corrosion, breakage and match the color specified on drawing schedule and specifications.

D. Subbase:

Subbase will support the wall sleeve when it extends into the room more than 4 inches. Subbase must come from the factory pre-assembled, with a built in receptacle (size as specified on drawing schedule and specifications) or with factory installed hardwire, pre-sized for an exact fit to the unit.

1.02 QUALITY ASSURANCE

System shall be approved and certified by UL and UL, Canada. Chassis capacity and efficiency performance shall be certified in accordance with ARI standard 310/380. Chassis shall meet ASHRAE Standard 90.1 for minimum energy efficiency.

1.03 DELIVERY, STORAGE, AND HANDLING

A. The packaging of the chassis shall be sufficient to protect the chassis from damage during shipment via an enclosed truck. Chassis must also be able to withstand an impact force of 10 g's and a random continuous force of 1g, during shipping.

B. Chassis, wall sleeves, and grilles shall be shipped in separate cartons. Universal handling instructions shall be defined and visible on the carton, from front, back and sides.

C. Chassis shall be capable of withstanding temperatures from –40 F to 155 F, at 5 to 95 percent RH, non-condensing, during shipment and storage, without component failure.

D. Unit shall be stored and handled per manufacturer's recommendations.

Part 2 — Products

2.01 EQUIPMENT

A. General:

Factory-assembled, single-piece heating and/or cooling unit. Contained within the unit enclosure shall be compressor, coils, fans and fan motor, heating means, controls, all wiring and piping, and a full refrigerant charge (R-22).

Packaged Terminal Air Conditioners shall be of the sizes and capacities as shown on the contract drawing schedule and in the specifications.

B. Chassis:

The chassis shall be a factory-assembled, single-piece heating and/or cooling unit, that is simple to install and operate. Just slide the chassis into a wall sleeve, plug it into an outlet, and operate after installation. The chassis dimensions shall not exceed 42 in. wide and 16 in. high with room cabinet in place. The chassis shall consist of the following functional sections and components:

1. Operating Characteristics:

   Chassis shall be capable of starting and running at 115 F ambient outdoor temperature per maximum load criteria of ARI Standard 310/380.

2. Electrical:

   Chassis shall be equipped with a 58 in. power cord for 208/230 v models or a 15 in. power cord for 265 v models. The chassis current draw shall be specified on the chassis nameplate and match electrical requirements specified on the Contract drawing schedule and specifications. The power cord plug configuration shall conform to NEMA standards and the rating shall support the current draw of the electric resistance heater.

   For 265 v installations, UL codes require the use of an electrical equipped subbase for power cord usage or hardwire conduit for non-corded installations.

C. Airflow System:

The airflow system shall consist of one permanent split-capacitor, direct-drive permanently lubricated, two-speed fan motor for the indoor and outdoor fans. The outdoor fan shall be a dynamically balanced, corrosion resistant polymer multi-blade axial flow design, with integrated slinger ring. The indoor fan shall be a dynamically balanced, polymer, reverse curve blower wheel, to assure uniform

air distribution. The Fan Motor shall be of an enclosed design to reduce the effects of moisture and corrosion.

D. Compressor and Refrigerant:

The rotary-type Compressor shall be fully hermetic with internal and external vibration isolation. The refrigeration system will be sealed and contain a full refrigerant charge (R-22).

E. Coils:

Condenser and evaporator coils to be constructed of high-efficiency, 11 element lance sine wave enhanced aluminum fins and $^{3}/_{8}$-in. seamless axial grooved copper tubing, necessary to achieve EER and COP rating, as specified on the chassis name plate.

F. Factory-Installed Electric Heater:

The factory-installed, open coil type, electric heater is standard in heat/cool and heat pump chassis. The electric heater shall contain both an automatic reset and a one-shot over temperature protection device. The heating capacity of the electric heater shall be as identified on the Contract drawing schedule and in the specifications.

G. Controls:

All standard models shall be equipped with electro-mechanical controls to simplify the serviceability of the unit.

1. The chassis shall have standard controls, accessible and covered by a hinged door. The mode selection control shall consist of a mechanical rotary selector switch, which provides OFF, FAN ONLY, HEAT or COOL operations. The temperature selection control shall be an adjustable thermostat with upper and lower limits.
2. All standard models shall have a continuous/ fan cycle selector switch located behind the front panel. It shall allow the selection of continuous fan operation for maximum comfort or cycle operation (fan only runs with cooling or heating operation) for maximum energy savings.
3. All standard models shall have a Temperature Limiter control located behind the front panel. The temperature limiter allows a room temperature range to be set, to avoid extreme temperature settings, to maximize energy savings.
4. Emergency Heat Switch (Heat Pump Models Only) shall disable the compressor in heating mode and only allow the use of electric heat during heating cycles. The Emergency Heat switch is active at all outdoor ambient temperatures.
5. Wall thermostat chassis (RC and RP models) shall come from the factory ready for wall thermostat installation, including a blank out plate in place of the control knobs. No field-installed kits or wire harnesses shall be required.
6. Wall thermostat chassis (RC and RP models) shall have a user selectable fan speed control switch, on the control panel, to optimize fan speed for maximum comfort.

H. Safeties:

Compressor shall have automatic reset, over temperature and over current protection. The fan motor shall have an inherent, automatic reset over temperature protection. The electric heater shall have two over temperature protectors.

I. Front Panel (supplied with chassis):

Front panel shall be constructed of a polymer material to resist breakage and corrosion. It shall have a front louvered surface with integrated control door and air filters. The air filters shall be easily accessible without removing the front panel from the chassis.

J. Anti-Theft Control Knobs:

All chassis knobs shall resist breakage and corrosion. They shall be mounted on to the control box section and captured behind the front panel, to prevent unauthorized removal.

K. Bi-Directional Discharge Grille:

Bi-directional polymer discharge grille shall resist corrosion and breakage. It shall be easily set to direct air at 40 degrees from horizontal or 80 degrees from horizontal. This non-metallic discharge grille shall be cool to the touch during the heating cycle.

L. Ventilation:

The chassis shall have a manual adjustable fresh air vent with a concealed manual control. The vent control shall allow a maximum of 50 cfm of fresh air to be drawn into the room when the indoor fan is operating and the door is open. The ventilation air can be increased to approximately 95 cfm by adding the Booster Ventilation accessory kit (see section Q.13)

M. High-Efficiency Condensate Removal System:

The chassis shall have a condensate removal system consisting of a condensate suction port, to draw and atomize condensate, and a slinger ring integrated in the outdoor fan, to disperse condensate onto the condenser coil to be evaporated.

N. Snow Baffle:

The chassis shall contain a snow baffle to prevent melting snow from freezing and potentially damaging the outdoor fan.

O. Corrosion Protection (CP and RP Models Only):

Chassis with Corrosion Protection (CP,RP) shall be used for coastal or corrosive environments, to prolong the life of the product. Minimum requirements are:

1. All outdoor-exposed sheet metal parts shall be coated with a polyester powder coat paint.
2. Compressor and outdoor-fan motor finish shall be capable of withstanding 500 hours of salt spray testing per ASTM B-117.
3. Compressor mounting screws shall be Sermagard coated.
4. Outdoor coil fin stock shall be coated and able to withstand 1000 hours of salt spray testing per ASTM B-117.
5. Outdoor coil tube sheets shall be made of 316L stainless steel.

P. LATERAL DUCT SYSTEM (optional):

The lateral duct system shall allow one system to heat or cool two adjacent rooms, with up to a maximum of 30% of the discharge air being diverted to the adjoining room (a return air path must be provided from the adjoining room). The lateral duct kit consists of two main components, the plenum and the extension duct. In addition, the Kit includes an adjustable chassis discharge air grille, adjustable wall register and decorative wall molding for duct extension.

The Lateral Duct system shall be adaptable for either right or left side ducting, with a maximum duct extension of 4 feet. The duct run must be straight and horizontal; no bends or turns.

Q. Accessories:

1. Insulated Polymer Wall Sleeve (P/N: SLEEVE-INSUL-1PK) shall be made from a molded polymer, with factory-installed Styrofoam insulation and a minimum flammability rating of UL94-5V. The sleeve surface shall be textured to prevent shine and hide scratches.
2. Deep Wall Metal Wall Sleeve (up to 28-in.) (P/N: SLEEVE-EXTxx-1PK) shall be a one-piece, extended wall sleeve, with factory installed insulation and deep wall baffles integrated.
3. Architectural grille (P/N: GRILLE-PLA-xxxxx or GRILLE-ALU-xxxxx) shall be polymeric for long durable life or painted aluminum for a superior color match to the building.
4. Subbase (P/N: SUBBASE-xxxV-xxA) shall be pre-assembled from the factory and UL listed. Subbase options include:

   Non-electrical subbase: The non-electrical subbase shall be pre-assembled and provides mechanical support and requires no wiring.

   Electrical subbase: The electrical subbase shall be pre-assembled with factory-installed electrical junction box containing a receptacle for corded units.

   Hardwired subbase: The hardwired electrical subbase shall be pre-assembled with factory installed electrical junction box containing 19 in. of flexible conduit (for a perfect fit to the unit) and all mating connections.
5. Hardwire kit (P/N: HARDWIRE-KIT) shall provide a permanent connection to the unit. The hardwire kit mounts on the front right side of the unit and shall have 36 in. of flexible steel conduit and a Molex connector for easy connect/disconnect.
6. Condensate Drain (P/N: DRAIN-KIT-4PK) This universal drain kit shall be used internally or externally to route excess condensate to a drainage system. It can be field-installed on any Carrier wall sleeve. The drain kit shall be attached to the exterior right or left side of the wall sleeve for external draining or may be mounted to the bottom of the wall sleeve for internal draining.
7. Lateral Duct (P/N: LATERAL-DUCT) The kit shall include an adapter plenum, extension duct, wall register and wall molding. The lateral duct system allows one system to heat or cool two adjacent rooms, by directing up to 30% of the airflow to the adjacent room. See section 4.0 for detailed specification.
8. Energy management (P/N: EM-KIT) The kit shall allow individual units to be turned on and off from a remote location or by a motion sensing device. This kit interfaces to most energy management systems.
9. Lateral Air deflector (P/N: DEFLECTOR-1PK) Shall allow right or left air distribution from the chassis. Lateral air deflectors are recommended for units mounted in a corner or off-center in a room.
10. Security door (P/N: SECURITY-DOOR) The key-locking security door kit shall prevent unauthorized access to the unit's heating and cooling controls and prevents tampering with units in public locations and institutions. The security door shall include two matching keys and keys shall be common to all Carrier Security Door kits.
11. Wall Thermostats (P/N: TSTATCCBxx01-B) The digital wall thermostat shall operate with 24 VAC, be non-programmable, easy-to-use and provide maximum guest comfort.
12. Sleeve Molding (P/N: SLEEVE-MOLDING) shall trim the wall sleeve to the existing wall to hide wall joints and irregularities due to the sleeve opening.
13. Power Fresh Air Vent (P/N: PWR-VENT-DOORxxx) The Power Fresh Air Vent kit shall provide approximately 95 cfm of outdoor air for ventilation into the room. The kit shall have an automatically door that opens when the fan is on and closes when the fan is off.

Carrier
Packaged Terminal Air Conditioner Warranty

FULL ONE-YEAR WARRANTY — During the first year after purchase, CARRIER will, through its authorized independent servicing dealers or service stations*, and free of charge to the user or subsequent users, repair or replace any parts which are defective in material or workmanship. The replacement part can be a new or remanufactured part as provided at CARRIER'S sole option.

FULL EXTENDED FOUR-YEAR WARRANTY ON SEALED REFRIGERATION SYSTEM ONLY — During the second through fifth years after date of original purchase, CARRIER will, through its authorized servicing dealers and service stations* and free of charge to the end user or subsequent users, repair or replace the compressor, condenser, evaporator or connecting tubing if defective in material or workmanship. This includes system refrigeration charge. The replacement part can be new or a remanufactured part as provided at CARRIER'S sole option.

LIMITED EXTENDED FOUR-YEAR WARRANTY ON NON-SEALED REFRIGERATION SYSTEM ONLY — During the second through fifth years after date of original purchase, Carrier will, through its authorized servicing dealers and service stations and free of charge to the end user or subsequent users, repair or replace any non-sealed system part (motor, solenoid, thermistor, thermostat, relays, switch, capacitor, overload, drain valve, bulb heater, fan, stator) if defective in material or workmanship. The replacement part can be new or a remanufactured part at CARRIER'S sole option. THIS LIMITED WARRANTY DOES NOT INCLUDE LABOR, user is responsible for labor, including cost of diagnosis of problem, removal and transportation of the air conditioner to and from the service center, and reinstallation charges necessary to accomplish repair.

LIMITATION OF WARRANTIES — ALL IMPLIED WARRANTIES (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY) ARE HEREBY LIMITED IN DURATION TO THE PERIOD FOR WHICH EACH LIMITED WARRANTY IS GIVEN AND APPLIES. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THE EXPRESSED WARRANTIES MADE IN THIS WARRANTY ARE EXCLUSIVE AND MAY NOT BE ALTERED, ENLARGED, OR CHANGED BY ANY DISTRIBUTOR, DEALER, OR OTHER PERSON WHATSOEVER.

ALL WORK UNDER THE TERMS OF THIS WARRANTY SHALL BE PERFORMED DURING NORMAL WORKING HOURS. ALL REPLACEMENT PARTS, WHETHER NEW OR REMANUFACTURED, ASSUME AS THEIR WARRANTY PERIOD ONLY THE REMAINING TIME PERIOD OF THIS WARRANTY.

CARRIER WILL NOT BE RESPONSIBLE FOR:

1. **CLEANING REQUIRED PRIOR TO WARRANTY REPAIR.**
2. Standard maintenance, cleaning or damage resulting from failure to perform normal maintenance as outlined in the owner's manual.
3. Instruction on methods of control and use of air conditioning unit after initial installation.
4. Damage or repairs needed as a consequence of faulty installation or application. This is the responsibility of the installer.
5. Failure to start due to voltage conditions, blown fuses, open circuit breakers or any other damages due to the inadequacy or interruption of electrical services.
6. Damage or repairs needed as a consequence of any misapplication, abuse, unauthorized alteration, improper servicing or operation.
7. Damage as a result of floods, winds, fires, lightning, accidents, corrosive environment, or other conditions beyond the control of CARRIER.

   EXCEPTION TO CORROSIVE ENVIRONMENT IN ABOVE PARAGRAPH — Packaged terminal units (52 Series) built with corrosion protection are exempt from the exclusion — "Corrosive Environment." The unit model number is identified on the nameplate with a CP suffix.
8. Reimbursement for replacement parts or repair services which are not supplied or designated by CARRIER and which are specifically covered under this warranty.
9. CARRIER products installed outside the continental U.S.A., Alaska, Hawaii and Canada.
10. Shipping damage or damage as a result of transporting the unit. This is the responsibility of the selling dealer or the authorized Room Air Conditioner service station.
11. ANY SPECIAL, INDIRECT OR CONSEQUENTIAL PROPERTY OR COMMERCIAL DAMAGE OF ANY NATURE WHATSOEVER. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
12. Warranty coverage of accessory items (wall thermostats, wall sleeves, etc.).

NOTE: Service and Maintenance items excluded in this warranty may be covered by a separate service agreement through the seller at time of purchase.

*Authorized independent dealers or service stations are registered with Carrier Air Conditioning through its distributor organization.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Catalog No. 530-122 (Rev. 3/02)

Carrier Corporation

IF YOUR AIR CONDITIONER DOES NOT WORK, FOLLOW THESE STEPS IN ORDER:

1. CHECK THE THINGS YOU CAN DO YOURSELF. These include being sure the air conditioner is plugged in firmly in an appropriate receptacle, checking the fuse or circuit breaker and ensuring its replacement or resetting, if necessary, and rereading the instruction book to ensure that all controls are set properly. By doing this you can save money. Many unnecessary service calls result in the serviceman doing what the owner can do for him or herself.
2. CONTACT YOUR DEALER OR THE CARRIER AUTHORIZED SERVICE CENTER HE RECOMMENDS. They have been set up to handle the great majority of all possible service problems. The quickest, surest and best way to get your air conditioner back in service is to use this step before proceeding further.
3. CONTACT THE CARRIER DISTRIBUTOR SERVING YOUR AREA. Your dealer can give you his name or you can consult your yellow pages.
4. CONTACT CARRIER IF A SATISFACTORY SOLUTION IS NOT REACHED IN STEPS 2 AND 3.

   Carrier Air Conditioning
   Consumer Relations Department
   Carrier Parkway, P.O. Box 4808
   Syracuse, New York 13221
   Telephone: 1-800-894-6449

ACCESSORY LIST

ACCESSORY	FORM NUMBER	PART NUMBER	DESCRIPTION
Wall Sleeves	52S-48SI	WALL-SLEEVE-1PK WALL-SLEEVE-9PK SLEEVE-INSUL-1PK	Non-Insulated Polymer Wall Sleeve, 1 per pack Non-Insulated Polymer Wall Sleeve, 9 per pack Insulated Polymer Wall Sleeve, 1 per pack
	52S-50SI	SLEEVE-STEEL-1PK	Insulated Metal Wall Sleeve, 1 per pack
	52S-49SI	SLEEVE-EXT24-1PK SLEEVE-EXT26-1PK SLEEVE-EXT28-1PK	Extended Metal Wall Sleeve for Deep Wall Applications (24 in. deep), 1 per pack Extended Metal Wall Sleeve for Deep Wall Applications (26 in. deep), 1 per pack Extended Metal Wall Sleeve for Deep Wall Applications (28 in. deep), 1 per pack
	N/A	SLEEVE MOLDING	Molding kit to trim the wall sleeve to the wall
	52C,P-20SI	FR-SLEEVE-EXT	Friedrich wall sleeve extension to retrofit Carrier PTAC unit into Friedrich 11 1/2″ deep (T Series) wall sleeve. 1 per pack
Exterior Grilles*	52S-59SI	GRILLE-ALU-STAMP	Stamped Aluminum Exterior Grille, Clear Finish
	52S-58SI	GRILLE-PLA-ALPIN GRILLE-PLA-BROWN GRILLE-PLA-BEIGE	Polymer Architectural Rear Grille, Alpine (matches Carrier Wall Sleeve) Polymer Architectural Rear Grille, Brown Polymer Architectural Rear Grille, Beige
	52S-60SI	GRILLE-ALU-CLEAR GRILLE-ALU-WHITE GRILLE-ALU-BRONZ GRILLE-ALU-MBRNZ GRILLE-ALU-BROWN GRILLE-ALU-BEIGE GRILLE-ALU-ALPIN GRILLE-ALU-PEACH GRILLE-ALU-MELON GRILLE-ALU-LGREY GRILLE-ALU-SGREY GRILLE-ALU-RDBRK GRILLE-ALU-BLUE GRILLE-ALU-GREEN	Aluminum Architectural Exterior Grille, Clear Finish Aluminum Architectural Exterior Grille, White Aluminum Architectural Exterior Grille, Light Bronze Aluminum Architectural Exterior Grille, Medium Bronze Aluminum Architectural Exterior Grille, Brown (Dark Bronze) Aluminum Architectural Exterior Grille, Beige Aluminum Architectural Exterior Grille, Alpine (matches Carrier Wall Sleeve) Aluminum Architectural Exterior Grille, Peach Aluminum Architectural Exterior Grille, Melon Aluminum Architectural Exterior Grille, Light Grey Aluminum Architectural Exterior Grille, Slate Gray Aluminum Architectural Exterior Grille, Red Brick Aluminum Architectural Exterior Grille, Blue Aluminum Architectural Exterior Grille, Green
Subbase	52C,P-1SI	SUBBASE-NON-ELEC	Non-electrical Subbase
	N/A	LEVELING-LEGS	Adjustable leveling legs for leveling and support when a subbase is not used.
	52C,P-2SI	SUBBASE-230V-15A SUBBASE-230V-20A SUBBASE-230V-30A	Electrical subbase with factory-installed 208/230V, 15 amp receptacle Electrical subbase with factory-installed 208/230V, 20 amp receptacle Electrical subbase with factory-installed 208/230V, 30 amp receptacle
	52C,P-17SI	SUBBASE-265V-15A SUBBASE-265V-20A SUBBASE-265V-30A	Electrical subbase with factory-installed 265V, 15 amp receptacle Electrical subbase with factory-installed 265V, 20 amp receptacle Electrical subbase with factory-installed 265V, 30 amp receptacle
	52C,P-3SI	SUBBASE-HARDWIRE	Electrical subbase with factory-installed hardwire kit (230/208V and 265V)
Subbase Field-Installed Kits	52C,P-4SI	SUBBASE-SWITCH	Field-Installable Switch kit for an electrical subbase
	52C,P-5SI	SUBBASE-FUSE-15A SUBBASE-FUSE-20A SUBBASE-FUSE-30A	Field-Installed Fuse Kit (15 amp) for electrical subbase Field-Installed Fuse Kit (20 amp) for electrical subbase Field-Installed Fuse Kit (30 amp) for electrical subbase
Electrical Connections	52C,P-11SI	HARDWIRE-KIT-1PK	Permanent power connection to the unit (includes 36″ of flexible conduit and unit-mounted connector, 230/208V and 265V) 1 per pack
	52C,P-19SI	CONDUIT-INTF-4PK	Interface kit for field-supplied conduit to provide permanent power connection (230/208V and 265V) to the unit. Kit includes Molex connector for easy connect/disconnect. 4 per pack
Condensate Drain Kit	52S-53SI	DRAIN-KIT-4PK	Attaches to wall sleeve for controlled internal or external disposal of condensate 4 per pack
Wall Thermostats	N/A	HH01AD045 TSTATCCBPC01-B TSTATCCBPH01-B TSTATCCPAC01-B TSTATCCPHP01-B	Electro-mechanical Wall Thermostat (Heat/Cool and Heat Pump) Value Series Electronic Thermostat w/Digital display (Heat/Cool Models) Value Series Electronic Thermostat w/Digital display (Heat Pump Models) 7-Day Programmable Electronic Thermostat (Heat/Cool Models) 7-Day Programmable Electronic Thermostat (Heat Pump Models)
Wall Thermostat Interface Retrofit Kit	52C,P-7SI	RC-FIELDKIT230HC RC-FIELDKIT230HP RC-FIELDKIT265HC RC-FIELDKIT265HP	Field-installed wall thermostat retrofit kit to convert a standard 230V Heat/Cool unit to an RC unit. Wall thermostat sold separately (can be used to convert a cool only unit to RC). Field-installed wall thermostat retrofit kit to convert a standard 230V Heat Pump unit to an RC unit. Wall thermostat sold separately. Field-installed wall thermostat retrofit kit to convert a standard 265V Heat/Cool unit to an RC unit. Wall thermostat sold separately (can be used to convert a cool only unit to RC). Field-installed wall thermostat retrofit kit to convert a standard 265V Heat Pump unit to a RC unit. Wall thermostat sold separately.
	52C,P-27SI	2SPEED-TSTAT-KIT	Automatic heat/cool changeover thermostat with multiple fan speed control relay.
	N/A	TSTAT-COVER-6X7	Clear plastic locking thermostat cover prevents unauthorized access to thermostat. Cover for use with non-programmable and electro-mechanical thermostats. Outside dimensions: 6 1/2″ x 7 1/2″ x 2 15/16″. 1 per pack
	N/A	TSTAT-COVER-7X10	Clear plastic locking thermostat cover prevents unauthorized access to thermostat. Cover for use with programmable thermostats. Outside dimensions: 7 1/4″ x 9 3/4″ x 3 3/8″. 1 per pack
Replacement Filters	N/A	AIR-FILTER-10PK	Replacement air filters in package of 10
Energy Management	52C,P-10SI	EM-KIT	Allows unit to be turned on and off from a remote location (includes freeze guard protection)
Locking Security Control Door	52C,P-13SI	SECURITY-DOOR	Key-locking security door to prevent access to heating and cooling controls
Lateral Duct Kit	52C,P-14SI	LATERAL-DUCT	Ductwork to allow one unit to heat and cool two rooms (plenum plus extension duct and registers)
Power Fresh Air Vent	N/A	PWR-VENT-DOOR230 PWR-VENT-DOOR265	Power vent with automatic door that opens and closes when the fan turns on and off.(208/230V) Power vent with automatic door that opens and closes when the fan turns on and off. (265V)
Air/Curtain Deflector	52C,P-9SI	DEFLECTOR-1PK	Lateral air deflector, with individually adjustable louvers, to enhance air circulation, 1 per pack
	52C,P-21SI	CURTDFL-52CP-1PK	Curtain deflector for 52C and 52P models — prevents curtains from blowing into discharge air stream. 1 per pack. NOTE: Curtain deflector for previous models are also available. Contact Carrier Representative.
Touch-Up Paint	N/A	CARRIER-TOUCH-UP	Touch-up paint for repainting scratches or chips.

*Custom colors are also available.